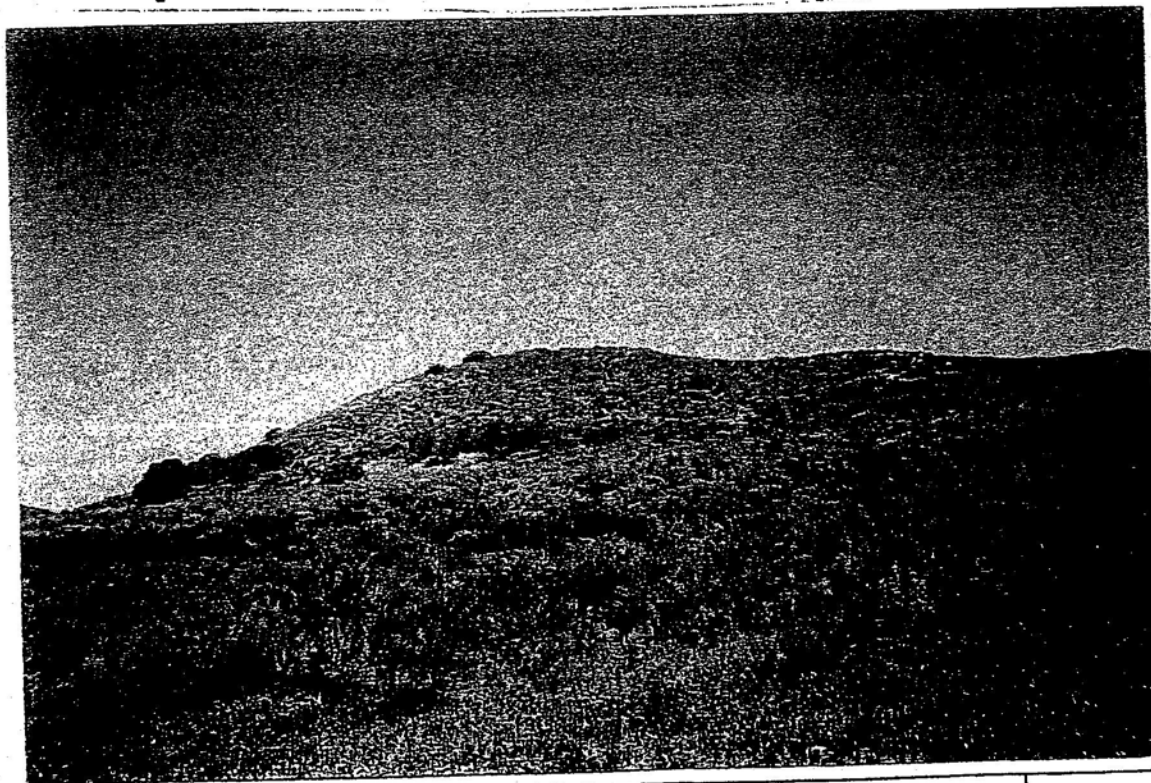




**View of prominent hilltops onsite, southern hill (top), northern hill (bottom)**



**REC**  
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**MONTECITO PROPERTY  
SITE PHOTOGRAPHS**

**Figure  
5**







**View *Plantago erecta* and *P. ovata* (typical population)**



**View of dirt road onsite with Indian Paintbrush and *Plantago* at side of road**

**REC**  
Consultants, Inc.

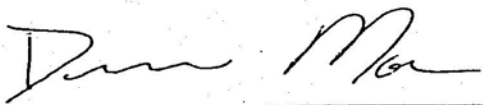
**MONTECITO PROPERTY  
SITE PHOTOGRAPHS**

**Figure  
6**

## 7.0 Conclusion

Although a total of 15 different butterfly species were observed, no Quino checkerspot butterflies were observed on the Montecito project site. Suitable habitat including larval host plants, nectar sources, and hilltops are available to this species onsite. However the site has historically been heavily grazed, under active agriculture, and continually disturbed making it less likely for this species to occur onsite.

This concludes the report of findings for a focused survey for the Quino checkerspot butterfly conducted on the Montecito Property.



Denise Moe

Federal Permit Number TE-009390-2

5-31-01  
Date



Elyssa Robertson

Federal Permit Number TE-7876714

5-31-01  
Date

## References Cited

- Ballmer, G., Hawks, D., Osborne, K., and Pratt, G., 2000. *The Quino Checkerspot Butterfly; Euphydryas editha quino*. Unpublished manuscript distributed at the Quino Workshop, January 2000, Riverside, California.
- Dudek 1992, *Biological Resources Assessment and Constraints Report for Montecito Ranch*.
- USDA. United States Department of Agriculture. 1973. Soil Survey of the San Diego Area, California. Soil Conservation Service, Washington, D.C.
- USFWS. United States Fish and Wildlife Service, 2001. *Quino Checkerspot Butterfly (Euphydryas editha quino) Draft Recovery Plan*. Region 1 Portland, Oregon. January 2001.
- U.S. Fish and Wildlife Service, 2000. *Year 2000 Survey Protocol: Quino Checkerspot Butterfly (Euphydryas editha quino)*. Unpublished manuscript, available from the Carlsbad Field Office, Carlsbad, California.
- U.S. Fish and Wildlife Service, 2000. *Information on the Quino Checkerspot Butterfly Year 2000 Survey Protocol*. Unpublished manuscript, available from the Carlsbad Field Office, Carlsbad, California.
- U.S. Fish and Wildlife Service, 1997. *Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly*. Federal Register 62(11):2313-2322.

Surveyor: DENISE MOE Date: 03/02/01Survey Visit No 12345Site Name: MONTECITO Site Location: RAMONATotal Site Acres: 935  
Total Acres Surveyed:       

## Conditions:

Skies: Clear Partly Cloudy Cloudy

Starting Temperature: 57°Ending Temperature: 60°

GUSTS - 5.4

Wind Speed @ Start: 1-7Wind Speed @ Finish: 0-3Time Start: 10:00Time Finished: 1:30Total Time: 3.5 HROnsite Land Uses: UNDEVELOPED, AGRICULTURE, AS

Surrounding Land Uses:

North -

South -

East -

West -

Host Plants/Nectar Sources/Hilltopping Locations Onsite: HILLTOP - NOTHING  
IN BLOOM YET

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides helesus</i>
Lord's sulfur	<i>Colias harrfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Mylitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Evaes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Celephelis wrightii</i>

# REC

## BIOLOGICAL SURVEY FORM

PROJECT NAME: Montecito

TYPE OF SURVEY: Habitat Survey for QCB

GENERAL LOCATION: Ramona

ON-SITE LAND USES:

SURROUNDING LAND USES:

NORTH:

SOUTH:

EAST:

WEST:

DATE: 3-2-01

SURVEYORS: Elyssa

START TIME: 10:00

TEMPERATURE: 57°

WIND: 1.7

SKY: overcast

END TIME: 1:30

TEMPERATURE: 60°

WIND: 0-3

SKY: overcast

### SENSITIVE SPECIES FOUND?

Habitats - Chap. CSS, Oak wldd, Enc. Wldd, NNG, Ag.  
dirt Rds

### FIELD NOTES:

*Erodium botrys*  
*Erodium cicutarium*  
*Gutierrezia*  
*Salvia apiana*  
*Art. cal.*  
*Eriogonum fasc.*  
*Scrophularia cal.*  
*Salvia mellifera*  
*Bromus rubens*  
*Brassica sp.*  
*Eriogonum sapharinum*  
*Chorogalum*

*Mirabilis*  
*Salsola iberica*  
*Rhus laurina*  
*Cassia erecta*  
*Quercus Engelmannii*  
*Quercus agrifolia*  
*Dicelaetis*  
*Coffea*  
*Diplacus puniceus*  
*Dudleya pulverulenta*  
*Lotus scoparius*  
*Yucca*

*Manah Macrocarpa*  
*Hayardia sq.*  
*Haplopappus ven.*  
*Cneoridium*  
*Perry's Tet.*  
*Sysirinchium*  
*Indian Paint brush*  
*Eumocarpus setigerus*

Turkey Vulture  
Painted Lady  
RTH  
Kestrel  
Crow  
meadowlark

## REC Consultants, Inc.

## Quino Survey Form

Surveyor: DENISE MOE Date: 3/5/01 Survey Visit No: 12345

Site Name: MONTECITO Site Location: RAMONA Total Site Acres: 935  
Total Acres Surveyed: 41

## Conditions:

Skies: Clear Partly Cloudy Cloudy

Starting Temperature: 65° Ending Temperature: 70°

Wind Speed @ Start: 0-6.7 Wind Speed @ Finish: 5-10 GUSTS UP TO 14 mph

Time Start: 10:45 Time Finished: 2:05 Total Time: 3hr 20min

## Onsite Land Uses:

## Surrounding Land Uses:

North -  
South -  
East -  
West -

Host Plants/Nectar Sources/Hilltopping Locations Onsite: LARGE HILLTOP ONSITE  
NOTHING IN BLOOM

LADY SP. - 2

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Chandryas gabbii</i>
purple hairstreak	<i>Attilides halesus</i>
ord's sulfur	<i>Colias harfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennai</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Mylitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Celephelis wrightii</i>



Surveyor: ElyssaDate: 3-5-01Survey Visit No: 112345Site Name: MontecitoSite Location: Rocky Hilltop  
Area 4Total Site Acres: 59.07  
Survey

## Conditions:

Skies: Clear Partly Cloudy CloudyStarting Temperature: 65°Ending Temperature: 70°Wind Speed @ Start: 6Wind Speed @ Finish: 5-10Time Start: 10:15 End: 2:05Total Time: 3 hrs 20 minOnsite Land Uses: one abandoned house

## Surrounding Land Uses:

North - open/rural  
 South - rural resident./airport  
 East - rural residential  
 West open

Host Plants/Nectar Sources/  
Hilltopping Locations Onsite:

Host Plants and Nectar  
 Sources not in bloom

Large Hilltop

## General Comments:

Very little in bloom

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bradonii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zerucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Hartford's sulfur	<i>Colias hartfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>
Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourful duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myfitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i> <u>///</u>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginianensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>



Surveyor: DENISE MOE Date: 3/12/01 Survey Visit No: 12345  
 Site Name: MONTECITO Site Location: RAMONA Total Site Acres: 935  
 Total Acres Surveyed: 107

## Conditions:

Skies (Clear) Partly Cloudy Cloudy

Starting Temperature: 63° Ending Temperature: 62° HIGH OF 65°

Wind Speed @ Start: 5-12 Wind Speed @ Finish: 4-11

Time Start: 11:30 Time Finished: 3:20 Total Time: 3HR 50min

## Onsite Land Uses:

## Surrounding Land Uses:

North -  
 South -  
 East -  
 West -

SEE FIRST  
 SURVEY FORM

## Host Plants/Nectar Sources/Hilltopping Locations Onsite:

SMALL AMOUNT OF MUSTARD STARTING TO BLOOM

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adalpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Lord's sulfur	<i>Colias hifordii</i>
Monroe's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mournful duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Mylitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

# Biological Survey Form

Survey Visit No: 1 2 3 4 5

Total Site Acres: 935

Total Survey Acres 82.96

Skies: (Clear) Partly Cloudy Cloudy

Ending Temperature: 162°

Wind Speed @ Finish: 4-11

Time Start: 11:30 End: 3:20  
Total Time: 3:20 h 50 min

### Surrounding Land Uses:

North -  
South -  
East -  
West

Host Plants/Nectar Sources/  
Hilltopping Locations Onsite:

mustard in bloom  
v'ed small hilltops

**General Comments:**

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Atlides halesus</i>
Hartford's sulfur	<i>Colias harfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>
Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mournful duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myliatta	<i>Phyciodes myliatta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginianensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Evers amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

Surveyor: DENISE MOEDate: 3/13/01Survey Visit No: 10345Site Name: MONTECITOSite Location: RAMONATotal Site Acres: 935  
Total Acres Surveyed: 82

## Conditions:

Skies: (Clear) Partly Cloudy CloudyStarting Temperature: 65°Ending Temperature: 67°Wind Speed @ Start: 5-9.7Wind Speed @ Finish: 0-8 GUSTS UP TO 12.4 MPHTime Start: 10:55Time Finished: 2:35Total Time: 3HR 40MIN

## Onsite Land Uses:

## Surrounding Land Uses:

North -

South -

East -

West -

SEE FIRST  
SURVEY FORMHost Plants/Nectar Sources/Hilltopping Locations Onsite: LARGE HILLTOP ONSITESMALL AMOUNT OF MUSTARD IN BLOOMBLUE SP. 1LADY SP. - 6

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Praxis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> 3
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Lord's sulfur	<i>Colias harrfordi</i>
Mahoe's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myiitta	<i>Phyciodes myiitta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> 2
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

Surveyor: E. Robertson Date: 3-13-01

Survey Visit No: 1 2 3 4 5

Site Name: Montecito Site Location: RamonaTotal Site Acres: 935Total Survey Acres  
89.22

## Conditions:

Skies: Clear Partly Cloudy CloudyStarting Temperature: 65Ending Temperature: 67Wind Speed @ Start: 5-9Wind Speed @ Finish: 0-8Time Start: 10:55 End: 2:35Total Time: 3 hrs 40 min

## Onsite Land Uses:

## Surrounding Land Uses:

North -

South -

East -

West

Host Plants/Nectar Sources/  
Hilltopping Locations Onsite:Plants in bloom: Erodium, Sys. bellum  
Black Sage, Mustard

## General Comments:

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurythema</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerana eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> /
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i> /
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orange tip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i> /
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Atlides halesus</i>
Hartford's sulfur	<i>Colias hartfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>
Lorquin's admiral	<i>Basilerchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Mylitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i> 6
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orange tip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anaballa</i> 4
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

Surveyor: DENISE MOE Date: 3/15/01 Survey Visit No: 12345Site Name: MONTECITO Site Location: RAMONA Total Site Acres: 935  
Total Acres Surveyed: 34

## Conditions:

Skies: Clear Partly Cloudy CloudyStarting Temperature: 70° Ending Temperature: 68°Wind Speed @ Start: 0-5 Wind Speed @ Finish: 0-5 GUSTS UP TO 10 MPHTime Start: 1:10 Time Finished: 2:45 Total Time: 1hr 35min

## Onsite Land Uses:

Surrounding Land Uses:

North -

South -

East -

West -

SEE FIRST  
SURVEY FORMHost Plants/Nectar Sources/Hilltopping Locations Onsite: LARGE HILLTOP ONSITE  
CRYPTANTHA, MUSTARD, AND CASTILLEJA AFFINIS BLOOMING

LADY SP /

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> 2
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis celhura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Lord's suffer	<i>Colias harrfordi</i>
Lord's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myliatta	<i>Phyciodes myliatta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> /
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginiensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

Surveyor: E. RobertsonDate: 3-15-01

Survey Visit No: 1 2 3 4 5

Site Name: MontecitoSite Location: RamonaTotal Site Acres: 935Total Acres  
Surveyed 38 acres

Conditions:

Skies (Clear) Partly Cloudy CloudyStarting Temperature: 70Ending Temperature: 68Wind Speed @ Start: 0-5Wind Speed @ Finish: 0-5Time Start: 1:10 End: 2:45Total Time: 1 hr 35 min

Onsite Land Uses:

Surrounding Land Uses:

North -  
South -  
East -  
WestHost Plants/Nectar Sources/  
Hilltopping Locations Onsite:Blooms, Mustard  
Cryptantha  
Castilleja

General Comments:

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulli</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> 2
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i> 3
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Atlides halesus</i>
Hartford's sulfur	<i>Colias hartfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrightii</i>
Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myiitta	<i>Phyciodes myiitta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> 2
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginiensis</i>
West coast lady	<i>Vanessa carye enabella</i> 2
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calophelis wrightii</i>



## REC Consultants, Inc.

## Quino Survey Form

Surveyor: Denise MoE Date: 3/19/01Survey Visit No: 12345Site Name: MONTE CITO Site Location: RAMONATotal Site Acres: 935  
Total Acres Surveyed: 67

## Conditions:

Skies: Clear Partly Cloudy CloudyStarting Temperature: 75° Ending Temperature: 84°Wind Speed @ Start: 0-5 Wind Speed @ Finish: 0-3 GUSTS UP TO 13 mphTime Start: 8:50 Time Finished: 1:20 Total Time: 4 HR 10 min

## Onsite Land Uses:

## Surrounding Land Uses:

North -

South -

East -

West -

SEE FIRST FORM  
SURVEY

## Host Plants/Nectar Sources/Hilltopping Locations Onsite:

CRYPTANTHA & MUSTARD IN BLOOM

LADY SP 20

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i> /
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulli</i> /
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae</i> ( <i>Pieris rapae</i> )
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i> /
Echo blue	<i>Calastriana ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i> /
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Hoford's sulfur	<i>Colias hofordii</i>
Hoford's checkerspot	<i>Euphydryas chalcedona henei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Mylitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i> 2
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> 6
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>



# REC Consultants, Inc.

# Biological Survey Form

Surveyor: E. Robertson Date: 3-19-01

Survey Visit No: 1 2 3 4 5

Site Name: Montecito Site Location: Ramona

Total Site Acres: 935

Total acres surveyed 48.87

Conditions:

Skies: Clear Partly Cloudy Cloudy

Starting Temperature: 75°

Ending Temperature: 84°

Wind Speed @ Start: 0-5

Wind Speed @ Finish: 0-3

Time Start: 8:50 End: 1:20

Total Time: 4 hr 10 min

Onsite Land Uses:

Surrounding Land Uses:

North -  
South -  
East -  
West

Host Plants/Nectar Sources/  
Hilltopping Locations Onsite:

General Comments:

Blue 2

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i> 1
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> 3
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bradowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i> 1
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zerucco funeralis</i> 3
Gabb's checkerspot	<i>Cheridryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Hartford's sulfur	<i>Colias hartfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>
Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i> 16
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> 3
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginianensis</i>
West coast lady	<i>Vanessa carye anabella</i> 1
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

Surveyor: DENISE MOE Date: 3/20/01Survey Visit No: 12345Site Name: MONTECITO Site Location: RAMONATotal Site Acres: 935  
Total Acres Surveyed: 47

## Conditions:

Skies: (Clear) Partly Cloudy CloudyStarting Temperature: 70° Ending Temperature: 78°Wind Speed @ Start: 0-3 Wind Speed @ Finish: 0Time Start: 8:15 Time Finished: 10:15 Total Time: 2 HR

## Onsite Land Uses:

Surrounding Land Uses:

North -  
South -  
East -  
West -SEE FIRST  
SURVEY FUEM

## Host Plants/Nectar Sources/Hilltopping Locations Onsite:

CRYPTANTHA, MUSTARD, E. AMSLICKIA INTERMEDIA IN BLOOM

LADY SP 7

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i>
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Atlides halesus</i>
Gardner's sulfur	<i>Colias hardfordi</i>
Hewitt's checkerspot	<i>Euphydryas chalcedona hewitti</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myliatta	<i>Phyciodes myliatta</i>
Painted lady	<i>Vanessa cardui</i>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonoriensis</i>
Southern blue	<i>Glaucopsyche lygdamus australis</i>
Virginia lady	<i>Vanessa virginiensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

Surveyor: Denise Moe Date: 3/27/01Survey Visit No: 1234Site Name: MONTECITOSite Location: RANONATotal Site Acres: 935Total Acres Surveyed: 83

## Conditions:

Skies: (Clear) Partly Cloudy CloudyStarting Temperature: 60°Ending Temperature: 72° HIGH OF 77°Wind Speed @ Start: 0-2Wind Speed @ Finish: 0-3 GUSTS UP TO 8 MPHTime Start: 9:00Time Finished: 2:45Total Time: 5 hr 45 min

## Onsite Land Uses:

Surrounding Land Uses:

North -

South -

East -

West -

FIRST FURM  
SEE SURVEY

LARGE HILTOP ON SITE

Host Plants/Nectar Sources/Hilltopping Locations Onsite: PLANTAGO ERECTA, CRYPTANTHUS  
KECKIELLA, CHIA, MUSTARD, BLUE DICK, AMISILCKIA, INDIAN PAINTBRUSH

BLUE SP. 7

LADY SP. 26

Common Name	Scientific Name	
Acmon blue	<i>Plebejus acmon acmon</i>	4
Alfalfa butterfly	<i>Colias eurytheme</i>	
Anisq swallowtail	<i>Papilio selicaon</i>	
Behr's metalmark	<i>Apodemia mormo virgulti</i>	5
Buckeye	<i>Praxis coenia</i>	
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>	
California dogface	<i>Zerene eurydice</i>	
California green hairstreak	<i>Callophrys affinis perplexa</i>	3
California ringlet	<i>Coenonympha tullia californica</i>	
California sister	<i>Adelpha bredowii californica</i>	
California tortoiseshell	<i>Nymphalis californica</i>	
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>	
Common hairstreak	<i>Strymon melinus pudica</i>	
Common white	<i>Pontia protodice</i>	
Echo blue	<i>Celastrina ladon echo</i>	
Felder's orangetip	<i>Anthocharis cethura</i>	
Funereal duskywing	<i>Erynnis zarucco funeralis</i>	9
Gabb's checkerspot	<i>Charidryas gabbii</i>	
Great purple hairstreak	<i>Allides halesus</i>	
Hof's sulfur	<i>Colias harfordi</i>	
Hof's checkerspot	<i>Euphydryas chalcedona hennel</i>	
Leanira checkerspot	<i>Thessalia leanira wrighti</i>	

Lorquin's admiral	<i>Basilarchia lorquini</i>	
Monarch	<i>Danaus plexippus</i>	
Mourning duskywing	<i>Erynnis tristis tristis</i>	
Mourning cloak	<i>Nymphalis antiopa antiopa</i>	
Mylitta	<i>Phyciodes mylitta</i>	
Painted lady	<i>Vanessa cardui</i>	5
Pale swallowtail	<i>Papilio eurymedon</i>	
Pigmy blue	<i>Brephidium exilis</i>	
Queen	<i>Danaus gilippus</i>	
Quino checkerspot	<i>Euphydryas editha quino</i>	
Red admiral	<i>Vanessa atalanta rubria</i>	
Sara orangetip	<i>Anthocharis sara</i>	12
Satyr anglewing	<i>Polygonia satyrus</i>	
Sleepy orange	<i>Eurema nicippe</i>	
Sonoran blue	<i>Philotes sonorensis</i>	
Southern blue	<i>Glaucopsyche ligdamus australis</i>	
Virginia lady	<i>Vanessa virginensis</i>	7
West coast lady	<i>Vanessa carye anabella</i>	
Western elfin	<i>Callophrys augustus iroides</i>	
Western tailed blue	<i>Everes amyntula</i>	
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>	
Wright's metalmark	<i>Calephelis wrightii</i>	

Surveyor: E. Robertson

Date: 3-27-01

Survey Visit No: 1 2 3 4 5

Site Name: Montecito

Site Location: Ramona

Total Site Acres: 935

Acres Surveyed  
78.89

Conditions:

Skies: Clear Partly Cloudy Cloudy

Starting Temperature: 66

Ending Temperature: 72

Wind Speed @ Start: 0-2

Wind Speed @ Finish: 0-3

Time Start: 9:00 End: 2:45

Total Time: 5 hr 45 min

Onsite Land Uses:

Surrounding Land Uses:

North -  
South -  
East -  
West

Host Plants/Nectar Sources/  
Hilltopping Locations Onsite:

General Comments:

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i> 9
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i> 8
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> 10
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudice</i>
Common white	<i>Pontia protodice</i> 1
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i> 8 11
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Atlides halesus</i>
Hartford's sulfur	<i>Colias hartfordi</i>
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>
Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myiitta	<i>Phyciodes myiitta</i>
Painted lady	<i>Vanessa cardui</i> 420
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> 67
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginiensis</i>
West coast lady	<i>Vanessa carye anabella</i> 2
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrightii</i>

18 additional Ladies  
3 Blues

Surveyor: DENISE MOE Date: 3/30/01Survey Visit No: 12345Site Name: MONTECITO Site Location: RAMONATotal Site Acres: 935  
Total Acres Surveyed: 82

## Conditions:

Skies: (Clear) Partly Cloudy CloudyStarting Temperature: 69° Ending Temperature: 76°Wind Speed @ Start: 0-3 Wind Speed @ Finish: 0-3 BUSTS UP TO 6.2Time Start: 9:30 Time Finished: 1:30 Total Time: 4 HR

## Onsite Land Uses:

Surrounding Land Uses:

North -

South -

East -

West -

FIRST FORM  
SEE SURVEY2 LARGE HILLTOPS ONSITE

Host Plants/Nectar Sources/Hilltopping Locations Onsite:

PLANTAGO ERECTA, CRYPTANTHUS  
KECKIELLA, CHIA, MUSTARD, BLUE DILKS, INDIAN PAINT BRUSH, & AMISINCKIABLUE SP. 3LADY SP. 13

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i>
Alfalfa butterfly	<i>Colias eurytheme</i>
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodamia mormo virgultii</i> <u>4</u>
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae</i> ( <i>Pieris rapae</i> )
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> <u>5</u>
California ringlet	<i>Coenonympha tullia californica</i> <u>2</u>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i>
Echo blue	<i>Calastria laron echo</i>
Felder's orangetip	<i>Anthocheilus cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i> <u>6</u>
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides halesus</i>
Lord's sulfur	<i>Colias harfordi</i>
Line's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leianira checkerspot	<i>Thessalia leianira wrighti</i>

Lorquin's admiral	<i>Basilearchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Myiitta	<i>Phyciodes myiitta</i>
Painted lady	<i>Vanessa cardui</i> <u>3</u>
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocheilus sara</i> <u>10</u>
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i> <u>1</u>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginianensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrighti</i>



## REC Consultants, Inc.

## Quino Survey Form

Surveyor: Denise Mae Date: 4/17/01Survey Visit No: 12345Site Name: MONTECITO Site Location: RAMONATotal Site Acres: 935Total Acres Surveyed: 85

## Conditions:

Skies: Clear Partly Cloudy CloudyStarting Temperature: 72° Ending Temperature: 80°Wind Speed @ Start: 0-3 Wind Speed @ Finish: 0-3 GUSTS UP TO 7.3 mphTime Start: 10:30 Time Finished: 2:00 Total Time: 3HR 30min

## Onsite Land Uses:

Surrounding Land Uses:

North -

South -

East -

West -

SEE FIRST FORM SURVEY

Host Plants/Nectar Sources/Hilltopping Locations Onsite:

PANTAGO ERECTA AND CASTILLEJA EXERTA - MUSTARD, CRYPTANTHA, ANSILIKIA, CHIA, BLUE DICKS, AND ANTIRRHINUM NUTTALLIANUM.LADY SP. 18 BLUE SP. 4

Common Name	Scientific Name
Acmon blue	<i>Plebejus acmon acmon</i> 2
Alfalfa butterfly	<i>Colias eurytheme</i> 2
Anise swallowtail	<i>Papilio selicaon</i>
Behr's metalmark	<i>Apodemia mormo virgulti</i> 7
Buckeye	<i>Precis coenia</i>
Cabbage white	<i>Artogeia rapae</i> ( <i>Pieris rapae</i> )
California dogface	<i>Zerene eurydice</i>
California green hairstreak	<i>Callophrys affinis perplexa</i> 1
California ringlet	<i>Coenonympha tullia californica</i>
California sister	<i>Adelpha bredowii californica</i>
California tortoiseshell	<i>Nymphalis californica</i>
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>
Common hairstreak	<i>Strymon melinus pudica</i>
Common white	<i>Pontia protodice</i> 1
Echo blue	<i>Celastrina ladon echo</i>
Felder's orangetip	<i>Anthocharis cethura</i>
Funereal duskywing	<i>Erynnis zarucco funeralis</i> 1
Gabb's checkerspot	<i>Charidryas gabbii</i>
Great purple hairstreak	<i>Allides helesus</i>
Ford's sulfur	<i>Colias ffordi</i>
He's checkerspot	<i>Euphydryas chalcedona hennei</i>
Leanira checkerspot	<i>Thessalia leanira wrighti</i>

Lorquin's admiral	<i>Basilarchia lorquini</i>
Monarch	<i>Danaus plexippus</i>
Mourning duskywing	<i>Erynnis tristis tristis</i>
Mourning cloak	<i>Nymphalis antiopa antiopa</i>
Mylitta	<i>Phyciodes mylitta</i>
Painted lady	<i>Vanessa cardui</i> 5
Pale swallowtail	<i>Papilio eurymedon</i>
Pigmy blue	<i>Brephidium exilis</i>
Queen	<i>Danaus gilippus</i>
Quino checkerspot	<i>Euphydryas editha quino</i>
Red admiral	<i>Vanessa atalanta rubria</i>
Sara orangetip	<i>Anthocharis sara</i> 2
Satyr anglewing	<i>Polygonia satyrus</i>
Sleepy orange	<i>Eurema nicippe</i>
Sonoran blue	<i>Philotes sonorensis</i>
Southern blue	<i>Glaucopsyche ligdamus australis</i>
Virginia lady	<i>Vanessa virginensis</i>
West coast lady	<i>Vanessa carye anabella</i>
Western elfin	<i>Callophrys augustus iroides</i>
Western tailed blue	<i>Everes amyntula</i>
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>
Wright's metalmark	<i>Calephelis wrighti</i>

Surveyor: DENISE MBEDate: 4/18/01Survey Visit No: 12345Site Name: MONTECITOSite Location: RAMONATotal Site Acres: 935Total Acres Surveyed: 47

## Conditions:

Skies: Clear (Partly Cloudy) CloudyStarting Temperature: 70°Ending Temperature: 70°Wind Speed @ Start: ØWind Speed @ Finish: Ø gusts up to 5 mphTime Start: 11:00Time Finished: 12:40Total Time: 1hr 40min

## Onsite Land Uses:

Surrounding Land Uses:

North -

South -

East -

West -

SEE FIRST  
SURVEY FORMHost Plants/Nectar Sources/Hilltopping Locations Onsite: CASTILLEJA EXSERTAMUSTARD, AMSONCKIA, CRYPTANTHA, BLUE DICKS, ANTIRRHINUMNUTTALLIAL.BLUE SP. 4.LADY SP. 5

Common Name	Scientific Name	
Acmon blue	<i>Plebejus acmon acmon</i>	3
Alfalfa butterfly	<i>Colias eurytheme</i>	
Anise swallowtail	<i>Papilio selicaon</i>	
Behr's metalmark	<i>Apodemia mormo virgulti</i>	4
Buckeye	<i>Precis coenia</i>	
Cabbage white	<i>Artogeia rapae (Pieris rapae)</i>	
California dogface	<i>Zerene eurydice</i>	
California green hairstreak	<i>Callophrys affinis perplexa</i>	
California ringlet	<i>Coenonympha tullia californica</i>	
California sister	<i>Adelpha bredowii californica</i>	
California tortoiseshell	<i>Nymphalis californica</i>	
Chalcedon checkerspot	<i>Euphydryas chalcedona chalcedona</i>	
Common hairstreak	<i>Strymon melinus pudica</i>	
Common white	<i>Pontia protodice</i>	
Echo blue	<i>Celastrina ladon echo</i>	
Felder's orangetip	<i>Anthocharis cethura</i>	
Funereal duskywing	<i>Erynnis zarucco funeralis</i>	1
Gabb's checkerspot	<i>Charidryas gabbii</i>	
Great purple hairstreak	<i>Allides halesus</i>	
Hanford's sulfur	<i>Colias hanfordi</i>	
Henne's checkerspot	<i>Euphydryas chalcedona hennei</i>	
Leanira checkerspot	<i>Thessalia leanira wrighti</i>	

Lorquin's admiral	<i>Basilarchia lorquini</i>	
Monarch	<i>Danaus plexippus</i>	
Mourning duskywing	<i>Erynnis tristis tristis</i>	
Mourning cloak	<i>Nymphalis antiopa antiopa</i>	
Myiitta	<i>Phyciodes myiitta</i>	
Painted lady	<i>Vanessa cardui</i>	2
Pale swallowtail	<i>Papilio eurymedon</i>	
Pigmy blue	<i>Brephidium exilis</i>	
Queen	<i>Danaus gilippus</i>	
Quino checkerspot	<i>Euphydryas editha quino</i>	
Red admiral	<i>Vanessa atalanta rubria</i>	
Sara orangetip	<i>Anthocharis sara</i>	
Satyr anglewing	<i>Polygonia satyrus</i>	
Sleepy orange	<i>Eurema nicippe</i>	
Sonoran blue	<i>Philotes sonorensis</i>	
Southern blue	<i>Glaucopsyche ligdamus australis</i>	
Virginia lady	<i>Vanessa virginianensis</i>	2
West coast lady	<i>Vanessa carye anabella</i>	
Western elfin	<i>Callophrys augustus iroides</i>	
Western tailed blue	<i>Everes amyntula</i>	
Western tiger swallowtail	<i>Papilio rutulus rutulus</i>	
Wright's metalmark	<i>Calephelis wrightii</i>	



## ATTACHMENT A

### CHECKLIST OF PLANTS OBSERVED ON THE MONTECITO RANCH PROJECT SITE 7-11 SEPTEMBER 2001

FAMILY/SPECIES	COMMON NAME
<b>Anacardiaceae</b>	
<i>Rhus ovata</i>	Sugar Bush
<i>Schinus molle</i>	Peruvian Pepper Tree
<i>Toxicodendron diversilobum</i>	Poison Oak
<b>Asteraceae</b>	
<i>Ambrosia psilostachya</i>	Western Ragweed
<i>Artemisia californica</i>	California Sagebrush
<i>Baccharis salicifolia</i>	Mule Fat
<i>Baccharis sarothroides</i>	Broom Baccharis
<i>Hazardia squarrosus</i>	Saw-toothed Goldenbush
<i>Holocarpha virgata</i>	Virgate Tarweed
<i>Isocoma menziesii</i>	Coast Goldenbush
<i>Lessingia filaginifolia</i>	California-Aster
<b>Boraginaceae</b>	
<i>Amsinckia menziesii</i>	Yellow Fiddleneck
<b>Brassicaceae</b>	
<i>Hirschfeldia incana</i>	Perennial Mustard
<b>Euphorbiaceae</b>	
<i>Eremocarpus setigerus</i>	Dove Weed
<b>Fagaceae</b>	
<i>Quercus agrifolia</i>	Coast Live Oak
<b>Geraniaceae</b>	
<i>Erodium botrys</i>	Long-beaked Filaree
<b>Lamiaceae</b>	
<i>Marrubium vulgare</i>	Horehound
<i>Salvia apiana</i>	White Sage
<i>Trichostema lanceolatum</i>	Vinegar Weed

ATTACHMENT A  
(Continued)

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FAMILY/SPECIES	COMMON NAME
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**Poaceae**

<i>Avena barbata</i>	Slender Wild Oat
<i>Bromus diandrus</i>	Ripgut Grass
<i>Bromus hordeaceus</i>	Soft Chess
<i>Bromus madritensis</i>	Foxtail Chess
<i>Distichlis spicata</i>	Saltgrass
<i>Nassella</i> sp.	Needlegrass
<i>Vulpia myuros</i>	Foxtail Fescue

**Polygonaceae**

<i>Eriogonum fasciculatum</i>	Leafy Buckwheat
<i>Rumex pulcher</i>	Fiddle Dock

**Rosaceae**

<i>Adenostoma fasciculatum</i>	Chamise
<i>Prunus ilicifolia</i>	Hollyleaf Cherry

**Salicaceae**

<i>Populus fremontii</i>	Fremont Cottonwood
<i>Salix lasiolepis</i>	Arroyo Willow

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Nomenclature follows Hickman (1993).

**APPENDIX H**

**STEPHEN'S KANGAROO RAT  
SURVEY RESULTS**

## **I. INFORMATION SUMMARY**

**REPORT DATE:** 4 September 2007

**PROJECT LOCATION:** T13S R1E Unsectioned (San Pasqual and Ramona 7.5' Quadrangles, SBBM)

**REFERENCE NUMBERS:** Montecito Ranch, Ramona, San Diego County, California

**OWNER/APPLICANT:** Montecito Properties LLC  
402 West Broadway, Suite 2175  
San Diego, CA 92101-7487

**PRINCIPAL INVESTIGATOR:** Michael J. O'Farrell  
O'Farrell Biological Consulting  
7320 Heggie Avenue  
Las Vegas, NV 89131

**REPORT SUMMARY:** An update survey for Stephens' kangaroo rat (SKR), *Dipodomys stephensi*, was conducted on 29 August-2 September 2007 on the 935-acre project site located northeast of the airport in Ramona, San Diego Co., California. The site is bordered on the east and south by scattered rural housing, on the west by vacant land, and the north by State Route 78 and scattered rural housing. Topography consists of a small valley in the eastern half surrounded by moderate hills and an alluvial plain in the western half bordered by the toe of steep slopes on the east and west. The property has been disturbed in the past by brush clearing, dryland farming, and associated livestock grazing. A network of dirt roads occurs across the property. In the western portion, there are remnants of old farm buildings, exotic trees, and other signs of past development. A network of dirt roads occurs across the property. The flatter portions of the property were in dryland farming but that activity has ceased. Vegetation is a mix of shrubland, live oak woodland, riparian scrub, and disturbed non-native grassland. Soils are a mosaic of sandy loams on the upper slopes and ridge tops with scattered rock outcrops and clays in the low areas. As with the previous survey (O'Farrell, 2002), kangaroo rat sign was found along the edge of dense shrubland with only two isolated patches of kangaroo rat sign along the existing dirt road traversing the eastern half of the property from east to west. No SKR were captured verifying the lack of abundant, diagnostic sign. The

property was totally unsuitable for SKR occupation prior to development of dryland farming. The areas used for farming are completely surrounded by habitat or disturbance hostile to the potential for colonization by SKR. No SKR have been found on or adjacent to the property, and there is no future potential for colonization. Implementation of project activities will not result in take of SKR.

## II. PROJECT AND PROPERTY DESCRIPTION

The 935-acre Montecito Ranch property is located 1.3 km (0.8 mi) northeast of the Ramona Airport, Ramona, San Diego Co., California. The site is bordered on the east and south by scattered rural housing, on the west by vacant land, and on the north by San Pasqual Valley Road (State Route 78) and scattered rural housing. Topography consists of a small valley in the eastern portion of the site surrounded by moderate hills and an alluvial flat in the west bordered on the east and west by the toe of steep slopes (see attached project map). The property has been disturbed in the past by brush clearing, dryland farming, and associated livestock grazing. In the eastern portion, there are remnants of old farm buildings, exotic trees, and other signs of past development. A network of dirt roads occurs across the property. Conditions during the present survey are similar to those found previously (O'Farrell, 2002), however, all dryland farming activities have stopped. Where freshly tilled land was found previously, now broad areas are dominated by disturbed non-native grassland.

Vegetation on the property is a mosaic of sage scrub (California buckwheat series), mixed chaparral, live oak woodland southern willow scrub, vernal pools, and disturbed non-native grassland throughout much of the cleared valley bottom and side slopes in the eastern portion of the site (see Attachment A). Designation of vegetation types follows Sawyer and Keeler-Wolf (1995). Soils consist of Bonsall-Fallbrook sandy loam, Cienega very rocky coarse sandy loam, Cienega-Fallbrook sandy loam, Fallbrook sandy loam, Placentia sandy loam, Ramona sandy loam, Visalia sandy loam, and Vista coarse sandy loam (Bowman et al., 1973).

## III. METHODOLOGY

The project site was visually examined and live-trap surveyed for Stephens' kangaroo rat (SKR), *Dipodomys stephensi*, from on 29 August-2 September 2007. The entire site was traversed on foot by two observers (M.J. O'Farrell and T.M. O'Farrell) to allow a complete examination of the site. A thorough search was made for diagnostic surface sign of SKR (i.e., burrows, scat, runways, tracks, dust baths), following the methodology developed by O'Farrell and Uptain (1989).

A single set of parallel trap lines was sampled within potential habitat that contained kangaroo rat sign (see attached map). Aside from limited kangaroo rat sign along the edge of dense shrubland, all attributable to *Dipodomys simulans*, this was the only sign found on the property. The road edge represents the most likely habitat if SKR were present; thus, the selection of this area for trapping. The parallel lines were situated immediately off the edge of the road within any area with kangaroo rat sign with traps placed at approximately 15-m

mixture of wild birdseed and peanut butter. Traps were checked at sunrise. All animals were identified to species and sex, assessed for relative age and reproductive activity, marked by clipping a patch of hair on the right flank, weighed and released at point of capture. Additional measures were obtained for each kangaroo rat captured following the methodology of O'Farrell (1989). Specific measurements found to assist in distinguishing between SKR and Dulzura kangaroo rats (DKR; *D. simulans*) were taken as follows: ear length (mm) from notch; width of zygomatic arch (mm) measured with dial calipers; hair width (0.001 mm) obtained with an ocular micrometer mounted in a Swift FM-31 microscope at 40X from hair clipped from dorsal midline anterior to the tail.

Weather conditions during the survey were characterized by hot days and warm nights. The moon was waning with illumination ranging from 95-65% through the course of the survey.

#### **IV. RESULTS**

Consistent with results from the previous survey (O'Farrell, 2002), sign of California ground squirrel (*Spermophilus beecheyi*) was sparse and primarily confined to the edges of the property or scattered rock outcrops. Likewise, Botta's pocket gopher (*Thomomys bottae*) was equally sparse and confined to peripheral areas. Trap success was low on all sites and the low species richness reflected the focused methodology for kangaroo rats. A single DKR was captured consistent with proximity to shrubland and the limited amount of surface sign. As with the previous survey (O'Farrell, 2002) SKR was absent from the site. I questioned the accuracy of an earlier survey (Dudek and Associates, 1998). Based on the current examination I am more convinced that the 1998 finding of SKR on the Montecito Ranch property to be in error.

Earlier (O'Farrell, 2002), I felt there was no reasonable explanation as to why SKR should not be on the Montecito Ranch. Since this time I have studied the SKR population at the Ramona Airport and other properties in the vicinity. Distribution is extremely limited and these animals exhibit an uncharacteristic lack of colonizing surroundings that are suitable, particularly west of Rangeland Road. I have examined the various potential movement corridors that animals could use from the airport and do not find anything suitable. Furthermore, the habitat within the project site is at best marginal and completely surrounded by hostile habitat. I don't believe SKR ever occupied any portion of the site and know that it has not since 2001.

#### **V. IMPACTS AND RECOMMENDATIONS**

No take of SKR is allowed at present under the Endangered Species Act unless Section 7 or Section 10(a) permits are issued to allow incidental take. The project site is outside the limits of areas covered by any existing Habitat Conservation Plan areas, thus requiring a new take permit. This can be accomplished by obtaining a Section 10(a) permit, which would require preparation of an HCP if SKR was found on the project site. However, SKR has not been found on or adjacent to the site. Implementation of the project will not result in take of SKR thus negating the need for permits.

## VI. REFERENCES

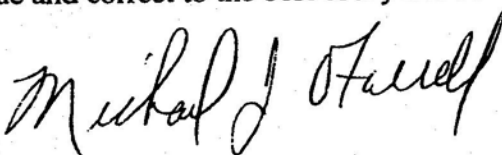
- Bowman, R.H., A. A. House, G. Kester, D. D. Estrada, J. K. Wachtell, G. L. Anderson, and P. V. Campo. 1973. Soil survey of the San Diego area, California. Part I. U.S. Department of Agriculture, Soil Conservation Service 104 pp + maps.
- Dudek and Associates. 1998. Stephens' kangaroo rat assessment for Montecito Ranch, San Diego County, California. Prepared for Caprock Three LLC.
- Hickman, J.C., Editor. 1993. The Jepson Manual: higher plants of California. University of California Press, Berkeley. 1400 pp.
- O'Farrell, M. J. 1989. Field identification of the endangered Stephens' kangaroo rat *Dipodomys stephensi* (Merriami 1907). Unpublished technical report to U.S. Fish and Wildlife Service. 19 pp.
- O'Farrell, M. J. 2002. Montecito Ranch, Ramona, San Diego County, California – Revised to Include Genetic Analysis. Report to Montecito Properties LLC.
- O'Farrell, M.J. and C. E. Uptain. 1989. Assessment of population and habitat status of the Stephens' kangaroo rat (*Dipodomys stephensi*). California Dept. Fish and Game Non-game Bird and Mammal Sect. Rept. 19 pp + appendices.
- Sawyer, O.J. and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento.

## VII. CERTIFICATION

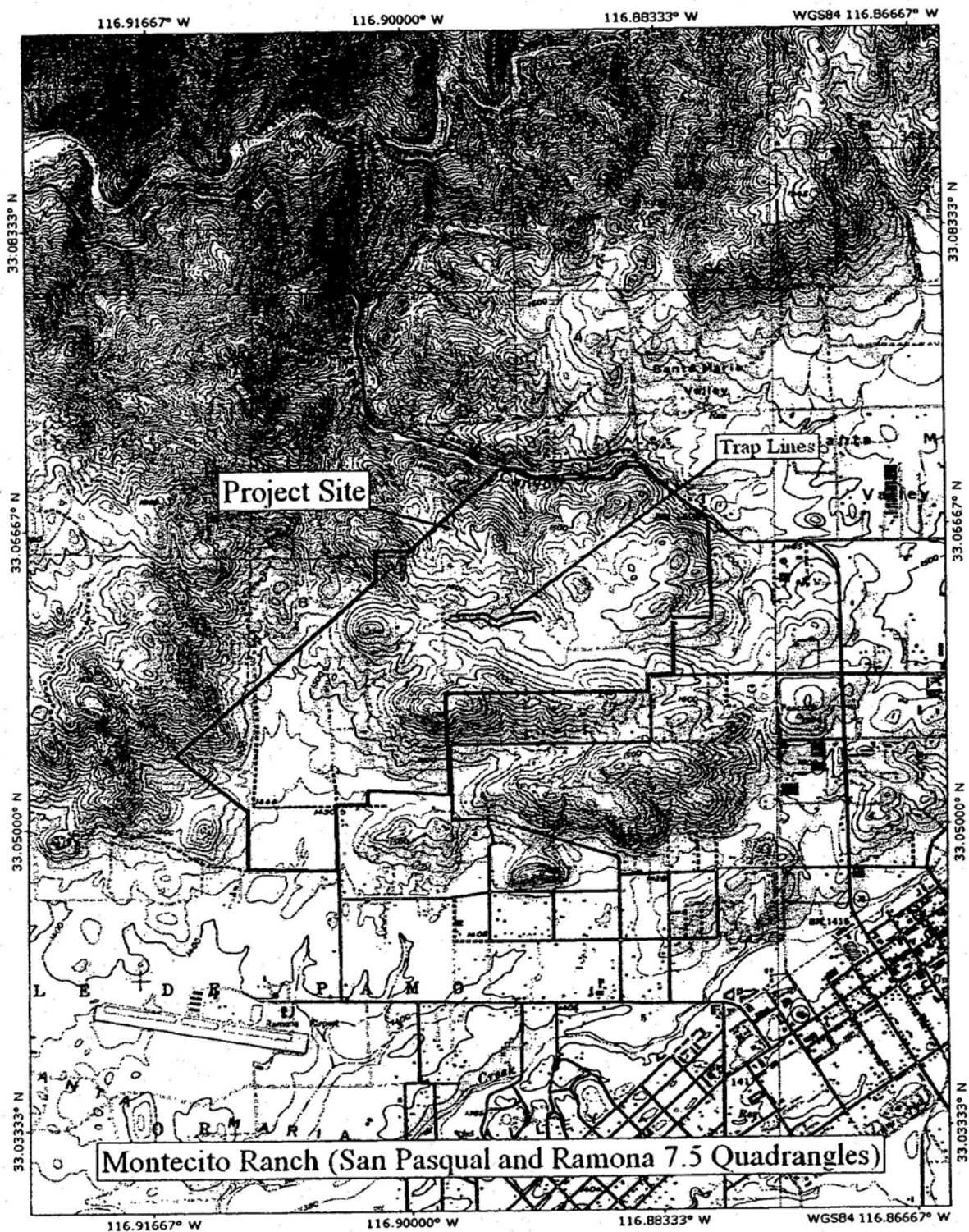
**CERTIFICATION:** I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

**DATE:** 4 September 2007

**SIGNED:**







TN  
17°

Map created with TOPO® © 2003 National Geographic (www.nationalgeographic.com/topo)

## ATTACHMENT A

### CHECKLIST OF PLANTS OBSERVED ON THE MONTECITO RANCH PROJECT SITE 29 AUGUST-2 SEPTEMBER 2007

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FAMILY/SPECIES	COMMON NAME
<hr/>	
<b>Anacardiaceae</b>	
<i>Rhus ovata</i>	Sugar Bush
<i>Schinus molle</i>	Peruvian Pepper Tree
<i>Toxicodendron diversilobum</i>	Poison Oak
<b>Asteraceae</b>	
<i>Ambrosia psilostachya</i>	Western Ragweed
<i>Artemisia californica</i>	California Sagebrush
<i>Baccharis salicifolia</i>	Mule Fat
<i>Baccharis sarothroides</i>	Broom Baccharis
<i>Hazardia squarrosus</i>	Saw-toothed Goldenbush
<i>Holocarpha virgata</i>	Virgate Tarweed
<i>Isocoma menziesii</i>	Coast Goldenbush
<i>Lessingia filaginifolia</i>	California-Aster
<b>Boraginaceae</b>	
<i>Amsinckia menziesii</i>	Yellow Fiddleneck
<b>Brassicaceae</b>	
<i>Hirschfeldia incana</i>	Perennial Mustard
<b>Euphorbiaceae</b>	
<i>Eremocarpus setigerus</i>	Dove Weed
<b>Fagaceae</b>	
<i>Quercus agrifolia</i>	Coast Live Oak
<b>Geraniaceae</b>	
<i>Erodium botrys</i>	Long-beaked Filaree
<b>Lamiaceae</b>	
<i>Marrubium vulgare</i>	Horehound
<i>Salvia apiana</i>	White Sage
<i>Trichostema lanceolatum</i>	Vinegar Weed

**ATTACHMENT A**  
**(Continued)**

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FAMILY/SPECIES	COMMON NAME
<hr/>	
<b>Poaceae</b>	
<i>Avena barbata</i>	Slender Wild Oat
<i>Bromus diandrus</i>	Ripgut Grass
<i>Bromus hordeaceus</i>	Soft Chess
<i>Bromus madritensis</i>	Foxtail Chess
<i>Distichlis spicata</i>	Saltgrass
<i>Nassella</i> sp.	Needlegrass
<i>Vulpia myuros</i>	Foxtail Fescue
 <b>Polygonaceae</b>	
<i>Eriogonum fasciculatum</i>	Leafy Buckwheat
<i>Rumex pulcher</i>	Fiddle Dock
 <b>Rosaceae</b>	
<i>Adenostoma fasciculatum</i>	Chamise
<i>Prunus ilicifolia</i>	Hollyleaf Cherry
 <b>Salicaceae</b>	
<i>Populus fremontii</i>	Fremont Cottonwood
<i>Salix lasiolepis</i>	Arroyo Willow

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Nomenclature follows Hickman (1993).

Please Note:

The following survey or study was conducted on Montecito Ranch prior to the agricultural operations performed onsite in 2001. Any discrepancies between this survey / study and the findings and representations of the Biological Technical Report are due to these operations.

## I. INFORMATION SUMMARY

REPORT DATE: 28 January 2002

PROJECT LOCATION: T13S R1E Unsectioned (San Pasqual and Ramona 7.5' Quadrangles, SBBM)

REFERENCE NUMBERS: Montecito Ranch, Ramona, San Diego County, California –  
Revised to Include Genetic Analysis

OWNER/APPLICANT: Montecito Properties LLC  
402 West Broadway, Suite 2175  
San Diego, CA 92101-7487

PRINCIPAL INVESTIGATOR: Michael J. O'Farrell  
O'Farrell Biological Consulting  
2912 N. Jones Boulevard  
Las Vegas, NV 89108

REPORT SUMMARY: A survey for Stephens' kangaroo rat (SKR), *Dipodomys stephensi*, was conducted on 7-11 September 2001 on the 935-acre project site located northeast of the airport in Ramona, San Diego Co., California. The site is bordered on the east and south by scattered rural housing, on the west by vacant land, and the north by State Route 78 and scattered rural housing. Topography consists of a small valley in the eastern half surrounded by moderate hills and an alluvial plain in the western half bordered by the toe of steep slopes on the east and west. The property has been disturbed in the past by brush clearing, dryland farming, and associated livestock grazing. A network of dirt roads occurs across the property. In the eastern portion, there are remnants of old farm buildings, exotic trees, and other signs of past development. A network of dirt roads occurs across the property. Currently, the western half of the property, with suitable terrain, is in active dryland farming. The eastern portion of this half has been recently disked and the western portion has been harvested. Vegetation is a mix of shrubland, live oak woodland, riparian scrub, and disturbed non-native grassland. Soils are a mosaic of sandy loams on the upper slopes and ridge tops with scattered rock outcrops and clays in the low areas. Kangaroo rat sign was found along the edge of dense shrubland with only two isolated patches of sign along the existing dirt road traversing the eastern half of the

property from east to west. Live trapping results yielded 10 kangaroo rats, all of which demonstrated external characters of the Dulzura kangaroo rat (DKR; *D. simulans*). Kangaroo rat sign was conspicuously absent from all expanses of valley floors dominated by preferred forb habitat. The nearest known location of SKR occupation is at the Ramona Airport, 1.3 km (0.8 mi) to the southwest of the project site. As an aggressive colonizer, SKR would be expected to occur. A previous survey of the project site (Dudek and Associates, 1998) documented SKR presence. However, the report was sufficiently equivocal as to cast doubt on its accuracy. If SKR were present in 1998 with current conditions reflecting those during that previous survey, they should be present now. There is no compelling explanation as to this discrepancy. The fact that other small mammal sign is also lacking from all the expanses that appear suitable for SKR adds to the mystery. Genetic analysis (see attachment by Metcalf) agrees with external measurements obtained in this study, and demonstrates that SKR does not currently occupy the Montecito Ranch.

## II. PROJECT AND PROPERTY DESCRIPTION

The 935-acre Montecito Ranch property is located 1.3 km (0.8 mi) northeast of the Ramona Airport, Ramona, San Diego Co., California. The site is bordered on the east band south y scattered rural housing, on the west by vacant land, and on the north by San Pasqual Valley Road (State Route 78) and scattered rural housing. Topography consists of a small valley in the eastern portion of the site surrounded by moderate hills and an alluvial flat in the west bordered on the east and west by the toe of steep slopes (see attached project map). The property has been disturbed in the past by brush clearing, dryland farming, and associated livestock grazing. In the eastern portion, there are remnants of old farm buildings, exotic trees, and other signs of past development. A network of dirt roads occurs across the property. Currently, the western half of the property, with suitable terrain, is in active dryland farming. The eastern portion of this half has been recently disked and the western portion has been harvested.

Vegetation on the property is a mosaic of sage scrub (California buckwheat series), mixed chaparral, live oak woodland southern willow scrub, vernal pools, and disturbed non-native grassland throughout much of the cleared valley bottom and side slopes in the eastern portion of the site (see Attachment A). Designation of vegetation types follows Sawyer and Keeler-Wolf (1995). Soils consist of Bonsall-Fallbrook sandy loam, Cienega very rocky coarse sandy loam, Cienega-Fallbrook sandy loam, Fallbrook sandy loam, Placentia sandy loam, Ramona sandy loam, Visalia sandy loam, and Vista coarse sandy loam (Bowman et al., 1973).

The property had been surveyed for SKR previously (Dudek & Associates, 1998). Although the report documented SKR, few animals were captured and the measures provided did not conclusively demonstrate the identity of animals captured. Further, vague statements were made concerning apparent suitability of portions of the property and map provided numerous points of designated SKR-occupied habitat. However, no animals were captured in these areas and there was no indication as to the criteria used to establish areas of occupation. To compound this problem, there were no boundaries given to distinguish the acreage actually referred to as



and dove weed. Kangaroo rat sign was conspicuously absent from all forbland. The sign at Sites 2 and 3 were consistent with the *Dulzura* kangaroo rat. The sign at Sites 1 and 4 was consistent with SKR although the remaining portion of the continuous dirt roadway also was conspicuously lacking in kangaroo rat sign.

Trap success was low on all sites and the low species richness reflected the focused methodology for kangaroo rats (Table 1). One species of kangaroo rat (DKR) was identified using the entire suite of external characters available (O'Farrell, 1989). Of the 10 kangaroo rats captured, 2 were juveniles; external measures are of questionable use and hair width of no value hence hair samples were not collected on these two individuals (Table 2). Coloration of one of the animals (#39) was pale, more consistent with SKR. Although there is little doubt that captured animals are all DKR, genetic analysis will definitively answer the question of identity for all animals captured. The genetic analysis confirmed that all individuals were DKR.

The nearest known area of SKR-occupation is on the Ramona Airport property to the southwest of the project site (1.3 km (0.8 mi; USFWS, 1998). There are suitable road edges connecting the airport and the Montecito Ranch. SKR is an aggressive colonizer (O'Farrell, 1990) and could easily gain access to and occupy suitable habitat on the project site. Thus, it would be expected that SKR occurred on the site during the previous survey (Dudek and Associates, 1998). However, the hesitant presentation and the equivocal measurements presented in that report lends little confidence to their conclusions. Further, they omitted specific data concerning existing distribution of ground squirrels and gophers and a clear description of exactly where 'diagnostic' sign was located in the eastern portion of the site. The stated locations of where the purported SKR were collected cast further doubt as to their accurate identifications. The area where all but one SKR was captured, at the extreme southeast corner of the property, contains a stand of mature blue gum and adjacent dense sage scrub. Both conditions would exclude SKR. The other capture coincided with out Site 1, which is active farmland and all kangaroo rat activity close to shrubland and occupied by DKR.

There is no reasonable explanation as to why SKR should not be on the Montecito Ranch. Although the western portion flats contain suitable soils, active farming will continue to exclude the ability for colonization. The eastern portion of the site appears ideal for SKR yet it is conspicuously absent from all habitat that is known to be occupied elsewhere in its range (broad open plains of forbland dominated by filaree and dove weed). The presence of small, discrete patches of DKR occupation at the same distances from shrubland found in the present study are consistent with findings elsewhere where SKR is absent (O'Farrell, personal experience). It is possible that SKR was present in low numbers in 1998 and for some unexplained reason became extirpated. However, conditions were identical and there is not compelling explanation as to how this might have occurred. One other fact that should be noted is the lack of other small mammal sign from the broad valley areas. Specifically, ground squirrels and gophers were lacking.

Table 1. Summary of rodent species captured on the Montecito Ranch Project Site, Ramona, San Diego Co., California (7-11 September 2001). See map for location of sampling sites. Nomenclature follows Wilson and Reeder (1993).

Species	Site 1	Site 2	Site 3	Site 4
<i>Dipodomys simulans</i>	2	2	5	1

Table 2. A summary of sex, reproductive condition, age, weight, and diagnostic external characters (ear from notch in mm; face width = zygomatic breadth in mm; and hair width) for kangaroo rats captured on the Highland Valley Estates project site, 22-25 October 2000.

Species	Sex	Reproductive Condition	Age	Ear	Face Width	Hair Width	Weight
DIPSIM #27	F	Non-active	Adult	16.5	25.2	0.042	48.0
DIPSIM #28	F	Pregnant	Adult	16.0	25.1	0.045	59.7
DIPSIM #29	F	Non-active	Juvenile	16.0	23.0	-	33.0
DIPSIM #30	M	Testes up	Juvenile	15.0	24.1	-	37.3
DIPSIM #32	F	Pregnant	Adult	18.0	25.0	0.51	73.4
DIPSIM #33	M	Testes Up	Juvenile	11.0	19.4	-	16.8
DIPSIM #38	F	Pregnant	Adult	16.5	24.5	0.042	56.5
DIPSIM #39	M	Testes Up	Adult	16.0	24.2	0.042	47.5
DIPSIM #40	M	Testes Up	Adult	16.0	24.7	0.42	60.0
DIPSIM #41	F	Non-active	Adult	17.0	25.1	0.042	59.8

# **ATTACHMENT SIX**

**Stephens' Kangaroo Rat Report  
for Montecito Ranch  
(O'Farrell Bio. Consulting, 2001)**

Please Note:

The following survey or study was conducted on Montecito Ranch prior to the agricultural operations performed onsite in 2001. Any discrepancies between this survey / study and the findings and representations of the Biological Technical Report are due to these operations.

## I. INFORMATION SUMMARY

REPORT DATE: 9 October 2001

PROJECT LOCATION: T13S R1E Unsectioned (San Pasqual and Ramona 7.5'  
Quadrangles, SBBM)

REFERENCE NUMBERS: Montecito Ranch, Ramona, San Diego County, California

OWNER/APPLICANT: Montecito Properties LLC  
402 West Broadway, Suite 2175  
San Diego, CA 92101-7487

PRINCIPAL INVESTIGATOR: Michael J. O'Farrell  
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property from east to west. Live trapping results yielded 10 kangaroo rats, all of which demonstrated external characters of the Dulzura kangaroo rat (DKR; *D. simulans*). Kangaroo rat sign was conspicuously absent from all expanses of valley floors dominated by preferred forb habitat. The nearest known location of SKR occupation is at the Ramona Airport, 1.3 km (0.8 mi) to the southwest of the project site. As an aggressive colonizer, SKR would be expected to occur. A previous survey of the project site (Dudek and Associates, 1998) documented SKR presence. However, the report was sufficiently equivocal as to cast doubt on its accuracy. If SKR were present in 1998 with current conditions reflecting those during that previous survey, they should be present now. There is no compelling explanation as to this discrepancy. The fact that other small mammal sign is also lacking from all the expanses that appear suitable for SKR adds to the mystery. Genetic analysis is underway and results will be appended to this report as soon as possible. If the genetic analysis agrees with external measurements obtained in this study, it will demonstrate that SKR does not currently occupy the Montecito Ranch.

## II. PROJECT AND PROPERTY DESCRIPTION

The 935-acre Montecito Ranch property is located 1.3 km (0.8 mi) northeast of the Ramona Airport, Ramona, San Diego Co., California. The site is bordered on the east band south y scattered rural housing, on the west by vacant land, and on the north by San Pasqual Valley Road (State Route 78) and scattered rural housing. Topography consists of a small valley in the eastern portion of the site surrounded by moderate hills and an alluvial flat in the west bordered on the east and west by the toe of steep slopes (see attached project map). The property has been disturbed in the past by brush clearing, dryland farming, and associated livestock grazing. In the eastern portion, there are remnants of old farm buildings, exotic trees, and other signs of past development. A network of dirt roads occurs across the property. Currently, the western half of the property, with suitable terrain, is in active dryland farming. The eastern portion of this half has been recently disked and the western portion has been harvested.

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this problem, there were no boundaries given to distinguish the acreage actually referred to as occupied.

### III. METHODOLOGY

The project site was visually and live-trap surveyed for Stephens' kangaroo rat (SKR), *Dipodomys stephensi*, from 7-11 September 2001. The entire site was traversed on foot by two observers (M.J. O'Farrell and T.M. O'Farrell) to allow a complete examination of the site. A thorough search was made for diagnostic surface sign of SKR (i.e., burrows, scat, runways, tracks, dust baths), following the methodology developed by O'Farrell and Uptain (1989).

Four discrete trapping areas were sampled within potential habitat that contained kangaroo rat sign (see attached map). The visual survey revealed that only these four areas contained kangaroo rat sign of any kind. Each configuration employed meandering single or parallel lines with traps placed at approximately 10-m intervals (Trapline 1 = 20 traps; 2 = 25; 3 = 25; 4 = 25, for a total of 95 mesh live traps). Trapping was conducted from 7-11 September 2001. Traps were opened in late afternoon and baited with a mixture of wild birdseed and peanut butter. Traps were checked at sunrise. All animals were identified to species and sex, assessed for relative age and reproductive activity, marked by clipping a patch of hair on the right flank, weighed and released at point of capture. Additional measures were obtained for each kangaroo rat captured following the methodology of O'Farrell (1989). Specific measurements found to assist in distinguishing between SKR and Dulzura kangaroo rats (DKR; *D. simulans*) were taken as follows: ear length (mm) from notch; width of zygomatic arch (mm) measured with dial calipers; hair width (0.001 mm) obtained with an ocular micrometer mounted in a Swift FM-31 microscope at 40X from hair clipped from dorsal midline anterior to the tail. Finally, a small wedge of tissue was clipped from the right ear, placed in a sealed vial, and placed on dry ice for genetic analysis conducted by Dr. A. Metcalf, California State University San Bernardino.

Weather conditions during the survey were characterized by warm days and mild nights. The moon was waning with illumination ranging from 79-41% through the course of the survey. A minimum of 2-5 hours of darkness occurred between sunset and moonrise, providing the moon was not covered by clouds.

### IV. RESULTS

Sign of California ground squirrel (*Spermophilus beecheyi*) was sparse and confined to the edges of the property or scattered rock outcrops. Likewise, Botta's pocket gopher (*Thomomys bottae*) was equally sparse and confined to peripheral areas. Two of the four patches of kangaroo rat sign were found along the edges (< 5 m) of dense California buckwheat series habitat (Sites 2 and 3). The remaining two patches of kangaroo rat sign were found along the edges of existing dirt roads (Sites 1 and 4). Site 1 was surrounded by freshly disked farmland but in close proximity (< 25 m) to dense shrubland. Site 4 was the furthest removed from the nearest

shrubland (> 150 m). Habitat surrounding Site 4 was homogenous forbland dominated by filaree and dove weed. Kangaroo rat sign was conspicuously absent from all forbland. The sign at Sites 2 and 3 were consistent with the Dulzura kangaroo rat. The sign at Sites 1 and 4 was consistent with SKR although the remaining portion of the continuous dirt roadway also was conspicuously lacking in kangaroo rat sign.

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Table 2. A summary of sex, reproductive condition, age, weight, and diagnostic external characters (ear from notch in mm; face width = zygomatic breadth in mm; and hair width) for kangaroo rats captured on the Highland Valley Estates project site, 22-25 October 2000.

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DIPSIM #38	F	Pregnant	Adult	16.5	24.5	0.042	56.5
DIPSIM #39	M	Testes Up	Adult	16.0	24.2	0.042	47.5
DIPSIM #40	M	Testes Up	Adult	16.0	24.7	0.42	60.0
DIPSIM #41	F	Non-active	Adult	17.0	25.1	0.042	59.8

## V. IMPACTS AND RECOMMENDATIONS

No take of SKR is allowed at present under the Endangered Species Act unless Section 7 or Section 10(a) permits are issued to allow incidental take. The project site is outside the limits of areas covered by any existing Habitat Conservation Plan areas, thus requiring a new take permit. This can be accomplished by obtaining a Section 10(a) permit, which requires preparation of an HCP. If a nexus exists involving other federal agencies, a Section 7 permit may be pursued as an interagency consultation streamlining the process. For example, drainage issues initiate involvement of the Army Corps of Engineers, which would trigger a Section 7 permit consultation. Either approach will necessitate formulating mitigation measures. Early informal consultation with U.S. Fish and Wildlife Service will provide guidance on the most efficacious way to proceed. However, if genetic analysis determines that all animals captured were DKR, there will be compelling evidence that SKR is not present on the Montecito Ranch project site. Lack of occupation by SKR will negate the need for take permits.

## VI. REFERENCES

- Bowman, R.H., A. A. House, G. Kester, D. D. Estrada, J. K. Wachtell, G. L. Anderson, and P. V. Campo. 1973. Soil survey of the San Diego area, California. Part I. U.S. Department of Agriculture, Soil Conservation Service 104 pp + maps.
- Dudek and Associates. 1998. Stephens' kangaroo rat assessment for Montecito Ranch, San Diego County, California. Prepared for Caprock Three LLC.
- Hickman, J.C., Editor. 1993. The Jepson Manual: higher plants of California. University of California Press, Berkeley. 1400 pp.
- O'Farrell, M. J. 1989. Field identification of the endangered Stephens' kangaroo rat *Dipodomys stephensi* (Merriami 1907). Unpublished technical report to U.S. Fish and Wildlife Service. 19 pp.
- O'Farrell, M. J. 1990. Stephens' kangaroo rat: Natural history, distribution, and current status. Memoirs of the Natural History Foundation of Orange County, 3:78-84.
- O'Farrell, M.J. and C. E. Uptain. 1989. Assessment of population and habitat status of the Stephens' kangaroo rat (*Dipodomys stephensi*). California Dept. Fish and Game Non-game Bird and Mammal Sect. Rept. 19 pp + appendices.
- Sawyer, O.J. and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento.

Wilson, D. E. and D. M. Reeder. 1993. Mammal species of the world: a taxonomic and geographic reference, second edition. Smithsonian Institution Press, Washington, D.C. 1206 pp.

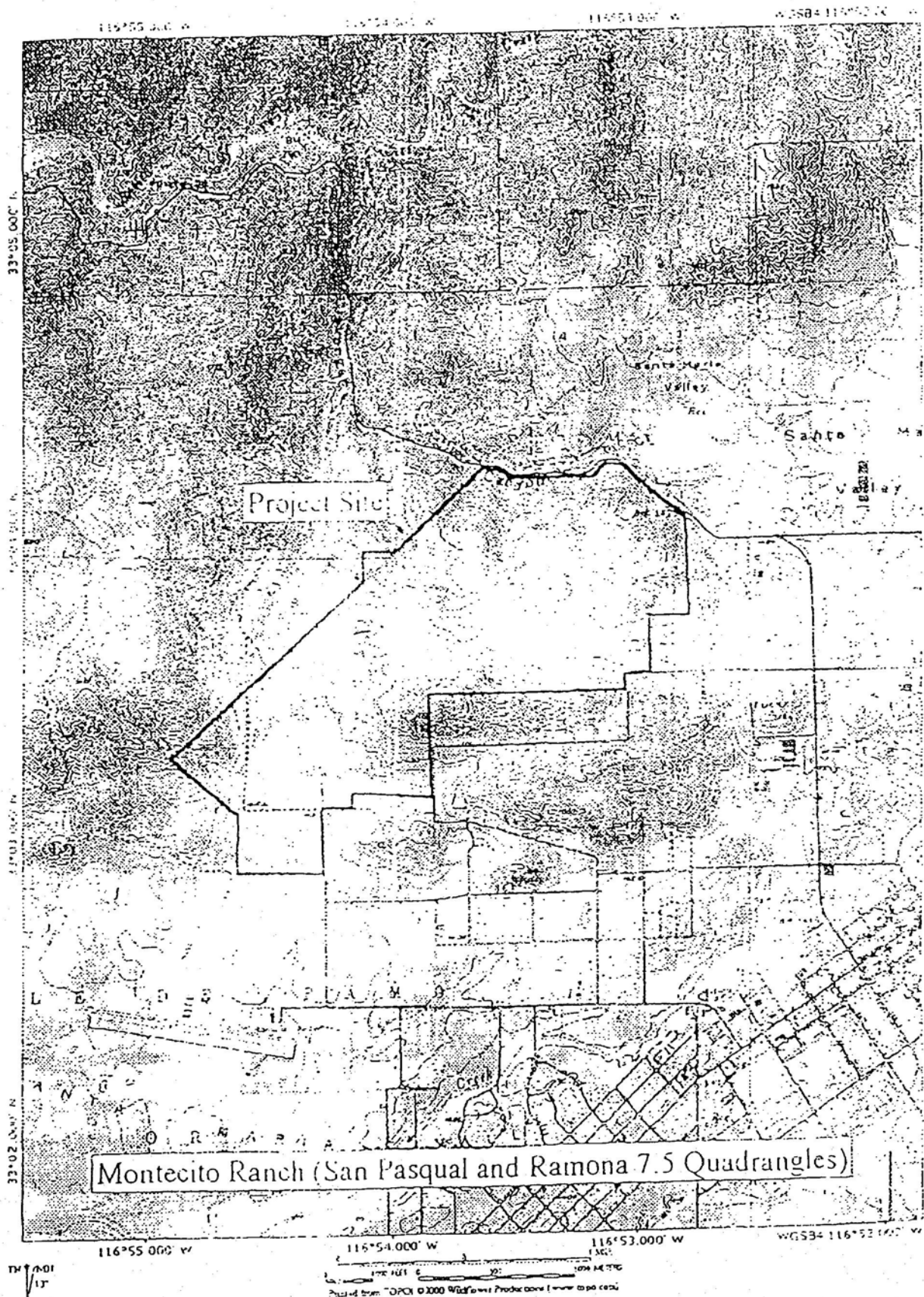
## VII. CERTIFICATION

**CERTIFICATION:** I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: 9 October 2001

SIGNED:

*Michael J. O'Fallon*



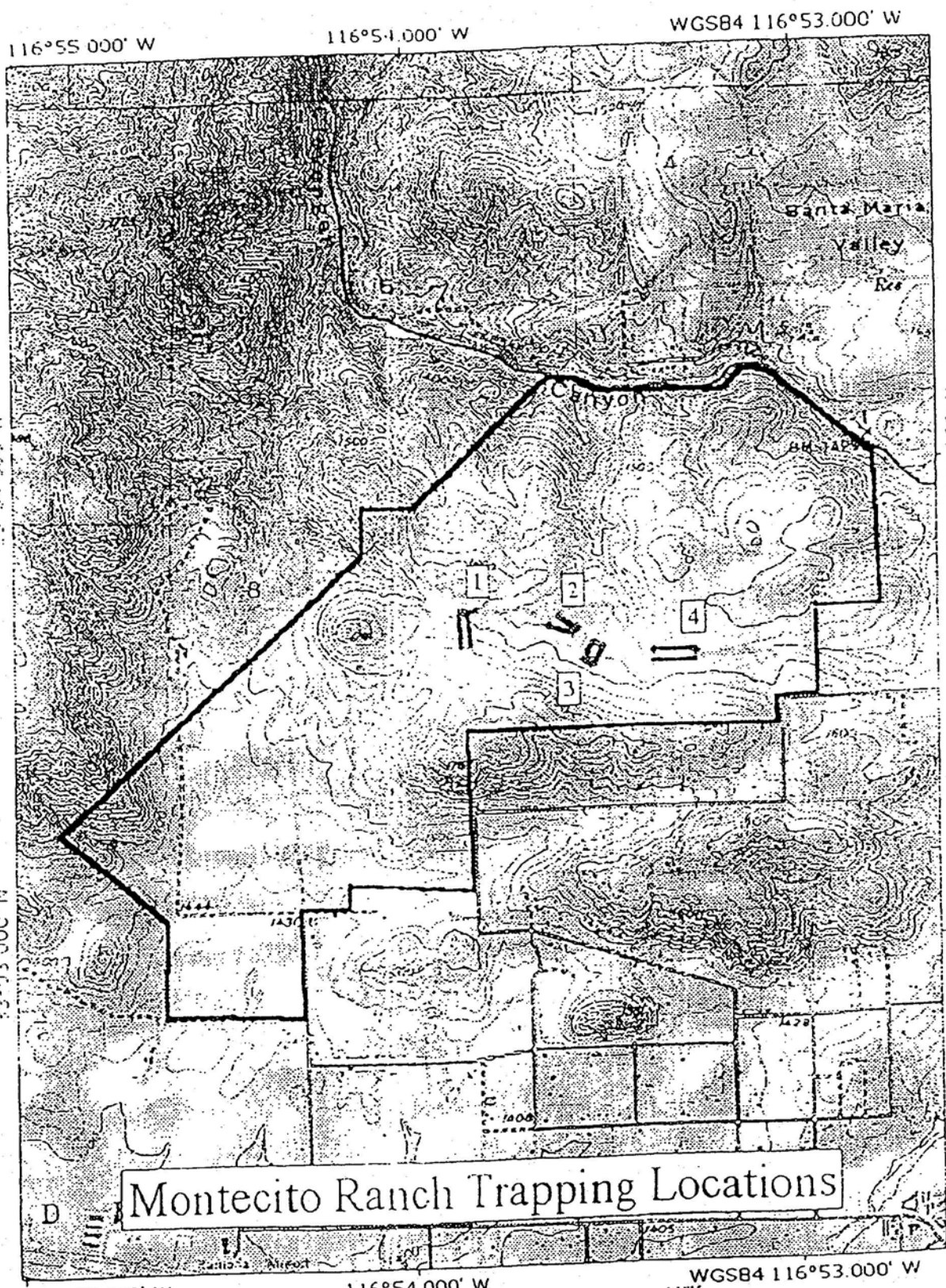
Montecito Ranch (San Pasqual and Ramona 7.5 Quadrangles)

116°55'00" W  
33°02'00" N

116°54'00" W  
116°53'00" W  
116°52'00" W  
0 1000 0 1000  
Feet Meters  
Produced from "OPN 0000" Wildfire Production (www.opn.ca.gov)

WG534 116°52'00" W





# Montecito Ranch Trapping Locations

TN / MN  
13°

0 1000 FEET 2000  
0 500 1000 METERS

Printed from TOPO! ©2000 Wildflower Productions (www.topo.com)

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- Dudek and Associates. 1998. Stephens' kangaroo rat assessment for Montecito Ranch, San Diego County, California. Prepared for Caprock Three LLC.
- Hickman, J.C., Editor. 1993. The Jepson Manual: higher plants of California. University of California Press, Berkeley. 1400 pp.
- O'Farrell, M. J. 1989. Field identification of the endangered Stephens' kangaroo rat *Dipodomys stephensi* (Merriami 1907). Unpublished technical report to U.S. Fish and Wildlife Service. 19 pp.
- O'Farrell, M. J. 1990. Stephens' kangaroo rat: Natural history, distribution, and current status. Memoirs of the Natural History Foundation of Orange County, 3:78-84.
- O'Farrell, M.J. and C. E. Uptain. 1989. Assessment of population and habitat status of the Stephens' kangaroo rat (*Dipodomys stephensi*). California Dept. Fish and Game Non-game Bird and Mammal Sect. Rept. 19 pp + appendices.
- Sawyer, O.J. and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, Sacramento.
- Wilson, D. E. and D. M. Reeder. 1993. Mammal species of the world: a taxonomic and geographic reference, second edition. Smithsonian Institution Press, Washington, D.C. 1206 pp.

## **VII. CERTIFICATION**

**CERTIFICATION:** I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

**DATE:** 28 January 2002

**SIGNED:**

## ATTACHMENT A

### CHECKLIST OF PLANTS OBSERVED ON THE MONTECITO RANCH PROJECT SITE 7-11 SEPTEMBER 2001

FAMILY/SPECIES	COMMON NAME
<b>Anacardiaceae</b>	
<i>Rhus ovata</i>	Sugar Bush
<i>Schinus molle</i>	Peruvian Pepper Tree
<i>Toxicodendron diversilobum</i>	Poison Oak
<b>Asteraceae</b>	
<i>Ambrosia psilostachya</i>	Western Ragweed
<i>Artemisia californica</i>	California Sagebrush
<i>Baccharis salicifolia</i>	Mule Fat
<i>Baccharis sarothroides</i>	Broom Baccharis
<i>Hazardia squarrosus</i>	Saw-toothed Goldenbush
<i>Holocarpha virgata</i>	Virgate Tarweed
<i>Isocoma menziesii</i>	Coast Goldenbush
<i>Lessingia filaginifolia</i>	California-Aster
<b>Boraginaceae</b>	
<i>Amsinckia menziesii</i>	Yellow Fiddleneck
<b>Brassicaceae</b>	
<i>Hirschfeldia incana</i>	Perennial Mustard
<b>Euphorbiaceae</b>	
<i>Eremocarpus setigerus</i>	Dove Weed
<b>Fagaceae</b>	
<i>Quercus agrifolia</i>	Coast Live Oak
<b>Geraniaceae</b>	
<i>Erodium botrys</i>	Long-beaked Filaree
<b>Lamiaceae</b>	
<i>Marrubium vulgare</i>	Horehound
<i>Salvia apiana</i>	White Sage
<i>Trichostema lanceolatum</i>	Vinegar Weed

**ATTACHMENT A**  
**(Continued)**

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FAMILY/SPECIES	COMMON NAME
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---

**Poaceae**

<i>Avena barbata</i>	Slender Wild Oat
<i>Bromus diandrus</i>	Ripgut Grass
<i>Bromus hordeaceus</i>	Soft Chess
<i>Bromus madritensis</i>	Foxtail Chess
<i>Distichlis spicata</i>	Saltgrass
<i>Nassella</i> sp.	Needlegrass
<i>Vulpia myuros</i>	Foxtail Fescue

**Polygonaceae**

<i>Eriogonum fasciculatum</i>	Leafy Buckwheat
<i>Rumex pulcher</i>	Fiddle Dock

**Rosaceae**

<i>Adenostoma fasciculatum</i>	Chamise
<i>Prunus ilicifolia</i>	Hollyleaf Cherry

**Salicaceae**

<i>Populus fremontii</i>	Fremont Cottonwood
<i>Salix lasiolepis</i>	Arroyo Willow

---

Nomenclature follows Hickman (1993).

The Species Identity of Kangaroo Rats (*Dipodomys*) Sampled on Montecito Ranch as  
Determined by Mitochondrial DNA D-loop Sequence

by

Anthony E. Metcalf  
Dept. of Biology  
California State University  
San Bernardino, CA 92407  
909 880-7501  
email: ametcalf@csusb.edu

Summary.

The DNA sequence of a 271 base pair variable region of the mitochondrial d-loop was obtained from six individuals sampled at Montecito Ranch in San Diego County, California. These sequences were compared to sequences from individuals unambiguously identified as Stephens' kangaroo rat (*Dipodomys stephensi*). The six individuals were initially identified as *Dipodomys simulans* in the field. The analysis of the sequences confirms their identification as *D. simulans*. Therefore, all of the six sequences from the Montecito Ranch samples were excluded from belonging to *D. stephensi*. The genetic analysis confirms this identification.

Materials and Methods.

DNA extraction:

Ear snips were collected in the field, and kept frozen using dry ice. In the laboratory, total DNA was extracted in one of two ways. In one method, the tissue samples were finely minced and quick-frozen with liquid nitrogen. Each treated sample was placed separately in a solution of TNE (10mM Tris-HCl, pH 8.0; 100mM NaCl; 1mM EDTA); 0.1% SDS and Proteinase K (50µg/ml final concentration) to a volume of 0.5 ml and vortexed briefly. The samples were incubated in the solution for 3 hours to overnight (55-37°C) to degrade the soluble proteins released from the tissue cells. Proteins were extracted using equal volumes of phenol and chloroform/isoamyl alcohol. The nucleic acids were precipitated using 1/10 volume 3M sodium acetate or 7.5 M ammonium acetate and 2.5 x volume cold 100% ethanol. Nucleic acids were resuspended in sterile, distilled water.



In the second method, total genomic DNA was obtained using Dneasy Tissue Kit silica gel membrane technique for DNA extraction (Qiagen, Inc.). The recovered DNA was stored in sterile distilled water.

#### Amplification and Sequencing of the d-loop region:

The 270 base pair region of the D-loop was obtained using the following PCR protocol. Each PCR reaction contained 0.05M Tris-HCl (pH 9.0), 0.02 M ammonium sulfate, 1.5mM MgCl<sub>2</sub>, 5-10  $\mu$ l of Taq Master (Eppendorf, Inc), and 0.5-1.0 units of *Thermus flavus* DNA polymerase in a volume of 50  $\mu$ l. Primer concentration varied from 0.25-0.5  $\mu$ M. Thirty-five cycles of PCR amplification were performed. Each cycle consisted of denaturation at 94°C for 45 seconds, annealing at 50-55°C for 60 seconds, and extension at 72° C for 90 seconds. Negative controls, where sterile water was added instead of DNA, were included to detect contamination. The primer pair used to amplify this region was TDKD and TAS as described in Good et al. (1997).

All PCR products were sequenced on both strands using TDKD and TAS as sequencing primers. All sequences were obtained using an ABI Prism Model 377 automated DNA sequencer. This produced a double stranded region of 271 bases for the genetic analysis.

#### Sequence variation:

The mtDNA sequences were aligned by CLUSTAL X (Thompson *et al.* 1997), edited in MacClade 4.0 (Maddison and Maddison, 2001) and exported into PAUP\* 4.0 (Swofford 2001) for phylogenetic analysis. The relationships among the sequences were evaluated using distance methods and maximum parsimony. Genetic distances within and between the two taxa were estimated from both the actual number of differing sites and from distances corrected for transition-transversion mutation bias (using the Kimura 2-parameter model, Kimura 1980).

The reliability of the internal branching of the distance trees and the maximum parsimony trees were estimated by performing 1000 bootstrap replications (Felsenstein 1985) in PAUP\*4.0.

#### Results and Discussion:

The phylogenetic analysis revealed that *D. stephensi* and *D. simulans* are genetically distinct, and reciprocally monophyletic. This division is well supported by the bootstrap analyses of the distance and parsimony trees at 100% confidence. The

number of base differences between the two species sampled ranged from 31 to 34, with an average divergence of 12%. When the pairwise distances were corrected for mutation bias, the mean genetic distance between the two was 13.5%. This is consistent with the distance between closely related groups within *Dipodomys* seen in other mitochondrial D-loop sequence studies (Metcalf et al. 2001)

The genetic distance within species differed dramatically. The average genetic distance among individuals within *D. simulans* ranged from 0 to 8 differences, with a mean difference of 5.1 bases. In contrast, the four *D. stephensi* individuals sampled from Highland Valley were identical over the 271 bases of the d-loop. This finding is consistent with another study that suggested genetic variation is low in the southern region of the range of *D. stephensi* (Metcalf et al. 2001).

All six individuals sequenced from Montecito Ranch always clustered within the *D. simulans* group, and so are considered to be *D. simulans*.

Literature cited:

- Felsenstein, J. 1985. Confidence limits on phylogenies: An approach using the bootstrap. *Evolution* 38: 16-24.
- Good, S. V., D. F. Williams, K. Ralls, and R. C. Fleisher. 1997. Population structure of *Dipodomys ingens* (Heteromyidae); the role of spatial heterogeneity in maintaining genetic diversity. *Evolution* 51: 1296-1310.
- Kimura, M. 1980. A simple method for estimating evolutionary rate of base substitutions through comparative studies of nucleotide sequences. *J. Mol. Evol.* 16: 111-120.
- Maddison, W. P. and D. R. Maddison 2001. MacClade: analysis of phylogeny and character evolution. Sunderland, Massachusetts, Sinauer Associates, Inc.
- Metcalf, A. E., Nunney, L. and Hyman, B. C. 2001 Geographic patterns of genetic differentiation within the restricted range of the endangered Stephens' kangaroo rat, *Dipodomys stephensi*. *Evolution* 56. 1233-1244

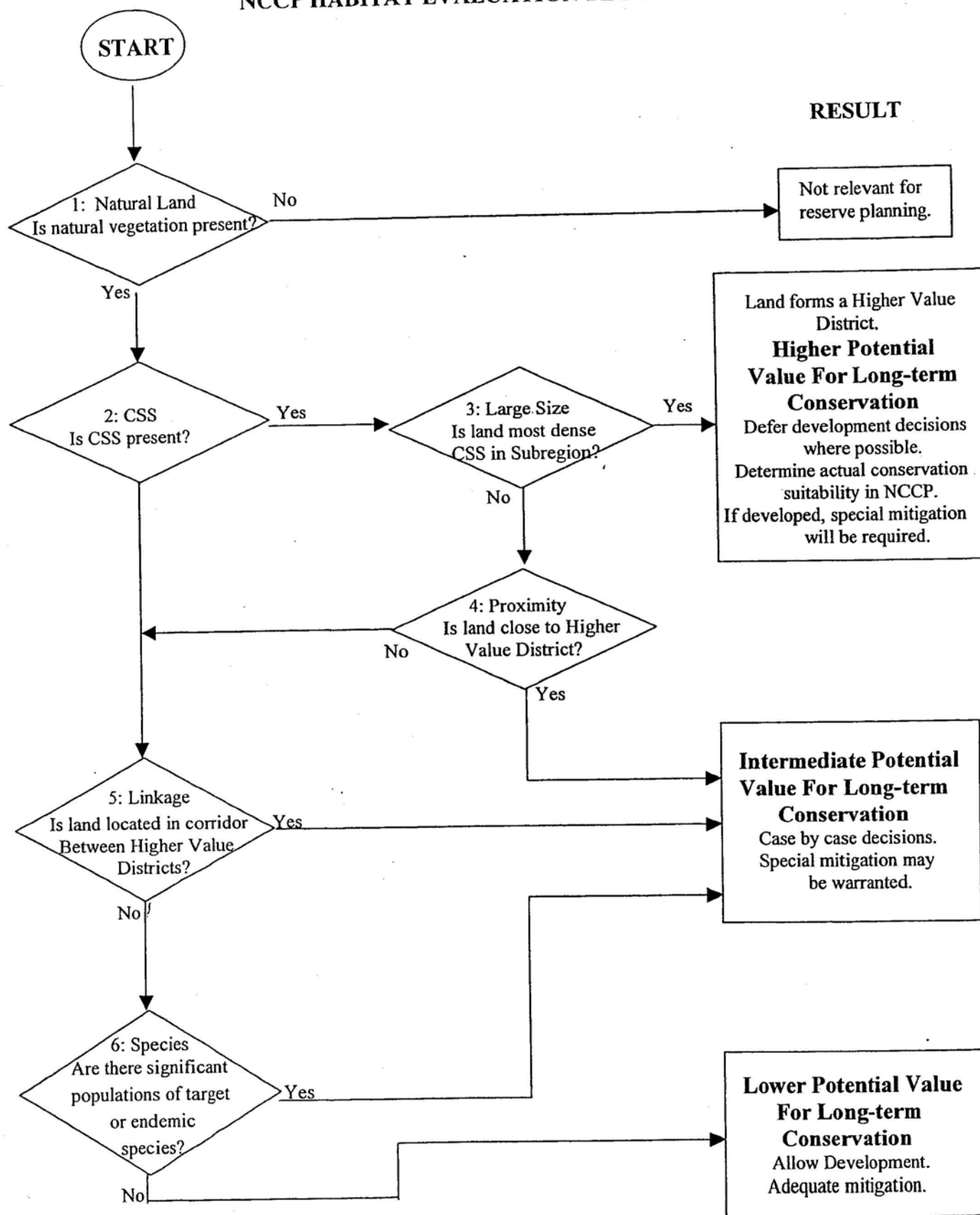
Swofford, D. L. 2001. PAUP\*: Phylogenetic Methods Using Parsimony (and Other Methods). Sinauer Associates, Sunderland, Mass.

Thompson, J.D., Gibson, T.J., Plewniak, F., Jeanmougin, F., and Higgins, D. G. 1997.  
The Clustal X windows interface: flexible strategies for sequence alignment aided  
by quality analysis tools. Nucleic Acids Research 24. 4876-4882

**APPENDIX I**

**NCCP FLOWCHART**

# **APPENDIX I** **NCCP HABITAT EVALUATION FLOW CHART**



**APPENDIX J**

**WETLAND REPORT**



**MONTECITO RANCH  
WETLAND DELINEATION REPORT**

**PREPARED FOR:**

**Montecito Ranch LLC  
402 West Broadway, Suite 2175  
San Diego, CA 92101-3542**

**PREPARED BY:**



Consultants, Inc.

**2442 Second Avenue  
San Diego, CA 92101  
(619) 232-9200**

**February 2008**

A handwritten signature in black ink, appearing to read "Elyssa Robertson", is written over a horizontal line.

**Elyssa Robertson  
County Certified Biologist**

---

**DPLU/DPR**

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# **MONTECITO RANCH WETLANDS AND WATERS JURISDICTIONAL DETERMINATION COUNTY OF SAN DIEGO**

## **1.0 INTRODUCTION**

The purpose of this study was to evaluate potential jurisdictional wetlands and waters on the Montecito Ranch property in Ramona, San Diego County. The site supports a number of areas that upon cursory review were considered potential jurisdictional waters and/or wetlands subject to agency jurisdiction. Therefore, a field jurisdictional investigation was conducted in future development areas that exhibit some type of wetland or drainage feature (i.e. eroded banks, riparian vegetation, standing water etc). This report summarizes the results of the jurisdictional investigation.

## **2.0 JURISDICTIONS & DEFINITIONS**

Wetlands and waters on the Montecito Ranch site could fall under the jurisdiction of the Army Corps of Engineers (ACOE), the California Department of Fish and Game (CDFG), and/or the County Resource Protection Ordinance (RPO). Each of these agencies defines and regulates wetlands and water differently, as summarized below.

### ACOE

Through implementation of the Clean Water Act, the Corps claims jurisdiction over waterways that are, or drain to, waters of the United States. The definition of “waters of the United States”, or waters, includes (but is not limited to) territorial seas; coastal and inland waters; lakes, rivers and streams that are navigable; tributaries to these waters; and wetlands adjacent to these waters or their tributaries. The jurisdictional limit of non-wetland waters (i.e. creeks and drainages) is the ordinary high water mark. The jurisdictional limit of wetland waters is the upper limit of the wetland. Delineation of wetland limits of conducted according to detailed procedures found in the Corps of Engineers Wetlands Delineation Manual (ACOE 1987).

The Corps wetland delineation procedure requires that a site must have wetland indicators within three parameters: vegetation, soils, and hydrology. If any one parameter does not contain a positive wetland indicator, the site is not a jurisdictional ACOE wetland.

### CDFG

The California Department of Fish and Game claims jurisdiction over rivers, streams and lake through the implementation of the California Fish and Game Code Section 1601. CDFG jurisdiction covers rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life; and watercourses having a surface or subsurface flow that supports or has supported riparian

vegetation. A field determination of CDFG jurisdictional is based on the presence of a channel with a bed and banks and potential wetland vegetation, at minimum. Jurisdiction usually extends to the top of bank or to the outer edge of wetland vegetation, whichever is wider.

### County of San Diego

The County claims jurisdiction over lands that meet the Resource Protection Ordinance (RPO) definition of wetlands, which is “all lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water.” To qualify as a wetland, an area need only have one of the three RPO criteria: (a) at least periodically, the land supports predominantly hydrophytes, (b) the substratum is predominantly undrained hydric soil, and (c) the substratum is nonsoil and is saturated with water or covered by water at some time during the growing season each year. The County also relies on its discretionary authority to claim areas that may not technically meet the RPO definition.

Definitions for each parameter per agency are provided below.

#### **Soils**

Hydric soil is defined as a soil that is “saturated, flooded or ponded” long enough during the growing season to develop anaerobic conditions in the upper portion. Anaerobic conditions influence the color of the soil. Therefore, the primary indicator of a wetland soil is its color. Soil colors, including the color of the matrix and mottles (if any) are determined using the Munsell Color Chart (Munsell 1994).

The color of a hydric soil falls into one of the following categories (1) matrix chroma of 2 or less in mottled soils or; (2) Matrix chroma of 1 or less in unmottled soils. The matrix and chroma color are based on the predominant color of the soil sample and determined by the Munsell color chart. Soils often have inclusions of colors other than the matrix color these areas of contrasting color are called mottles. Soil pits were dug at each sample point 18” inches into native soil. The color of the soil was observed while the soil was moist and was determined using the Munsell Color Chart (Munsell 1994).

#### **Hydrology**

The Corps of Engineers Wetlands Delineation Manual (ACOE 1987) defines wetland indicators for hydrology to include; visual observation of inundation, visual observation of soil saturation, water marks, drift lines, sediment deposits, and drainage patterns within wetlands. The ACOE description of the field wetland indicator of visual observation of inundation is as follows (ACOE 1987):

*“The most obvious and revealing hydrologic indicator may be simply observing the aerial extent of inundation. However, because seasonal conditions and recent*

*weather conditions can contribute to surface water being present on a non-wetland site, both should be considered when applying this indicator.”*

The ACOE description of the field wetland indicator of visual observation of soil saturation is as follows (ACOE 1987):

*“Examination of this indicator requires digging a soil pit to a depth of 16 inches and observing the level at which water stands in the hole after sufficient time has been allowed for water to drain into the hole. The required time will vary depending on the soil texture. In some cases, the upper level at which water is flowing into the pit can be observed by examining the wall of the hole. This level represents the depth to the water table. The depth to saturated soils will always be nearer the surface due to the capillary fringe. For soil saturation to impact vegetation, it must occur within a major portion of the root zone (usually within 12 inches of the surface) of the prevalent vegetation. The major portion of the root zone is that portion of the soil profile in which more than one half of the plant roots occur.”*

### **Vegetation**

The ACOE defines hydrophytic vegetation as the total plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). Plants that live under such conditions are considered hydrophytic (water loving) plants. Hydrophytic plants are listed in the Field Guide to Wetland Plants of California (USFWS 1982).

In order to meet the vegetation criteria, more than 50 percent of the dominant species within the sample area need to be OBL, FACW, or FAC, as defined below:

- Obligate Wetland Plants (OBL) – Plants that occur almost always in wetlands (>99%), rarely in non-wetlands (<1%).
- Facultative Wetland Plants (FACW) – Plants that usually occur in wetlands (>67% to 99%) but also occur in non-wetlands (1% to 33%).
- Facultative Plants (FAC) – Plants with the likelihood of occurring in wetlands or non-wetlands (33% to 67%).
- Facultative Upland Plants (FACU) – Plants that may occur in wetlands (1% to <33%) but occur more often in on-wetland areas (>67% to 99%).
- Obligate Upland Plants (UPL) – Plants that occur rarely in wetland (<1%), but occur primarily in non-wetlands (>99%).
- The three Facultative categories have an additional (+) and (-) subdivision, with (+) towards the higher probability, and (-) towards the lower.

Waters of the US is defined by the ACOE as all waters which are currently used or were used in the past including all waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, slough, wet meadows

or natural ponds.. The ACOE utilizes the Corps of Engineers Wetlands Delineation Manual (ACOE 1987) to define wetlands as “Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions.” That manual requires the presence of three parameters in evaluating whether or not a site is a wetland. A site is considered a wetland if it (1) supports hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Except for instances of disturbed or atypical conditions, a positive indicator for all three parameters must be present for a site to be considered a jurisdictional wetland. For atypical conditions, the missing parameter must be assessed under different criteria.

The CDFG defines their jurisdictional limits as areas of bed, channel or bank of any river, stream or lake designated by the department in which there is at any tie an existing fish or wildlife resource or from which these resources derive benefit. A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes water courses having a surface or subsurface flow that supports or has supported riparian vegetation. The CDFG usually marks its jurisdictional limit at the top of the stream or lake bank or at the outer edge of the riparian vegetation, whichever is wider.

The County Resource Protection Ordinance defines Wetlands as: All lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are “wetlands”:

1. at least periodically, the land supports predominantly hydrophytes (plants whose habitat is water or very wet places;
2. the substratum is predominantly undrained hydric soil;
3. the substratum is non-soil and is saturated with water or covered by water at some time during the growing season.

### **3.0 METHODOLOGY**

Potential onsite wetlands and waters were tentatively mapped during the spring and summer of 2001, and investigations of specific areas were conducted on July 16 and 17, 2001 by Elyssa Robertson, Catherine MacGregor, and Cheryl Rustin of REC Consultants, Inc. The areas were visually assessed for wetland indicators described above. In certain questionable areas, ACOE wetland determinations were conducted: a soil pit was dug and the soil evaluated for color and texture, vegetation was identified, and any evidence of hydrology was noted. This information was recorded on an ACOE data sheet, and, in combination with recorded information such as mapped soils types and plant wetland indicator status, was used to determine whether the location was wetland or upland.



After onsite wetland evaluation results were initially submitted, the County of San Diego expressed interest in a field review of the potential onsite wetlands. County biologists Dawn Dickman and Brett Solomon visited the site on February 13, 2002 and assessed areas in question with REC biologists. The results of the County's visit were summarized in Mr. Solomon's March 6, 2002 letter to REC. Based on the County's determinations and Mr. Solomon's suggestions, REC's wetland and waters determination was updated in 2002.


#### 4.0 RESULTS

Jurisdictional wetlands and waters maps are provided as an attachment to this report. Wetland and drainage types found onsite included ditches in uplands (CDFG), disturbed depressional wetlands (potential ACOE, RPO), seeps (RPO), agricultural ponds (ACOE and/or RPO), waters of the US (ACOE), and vernal pools (RPO).

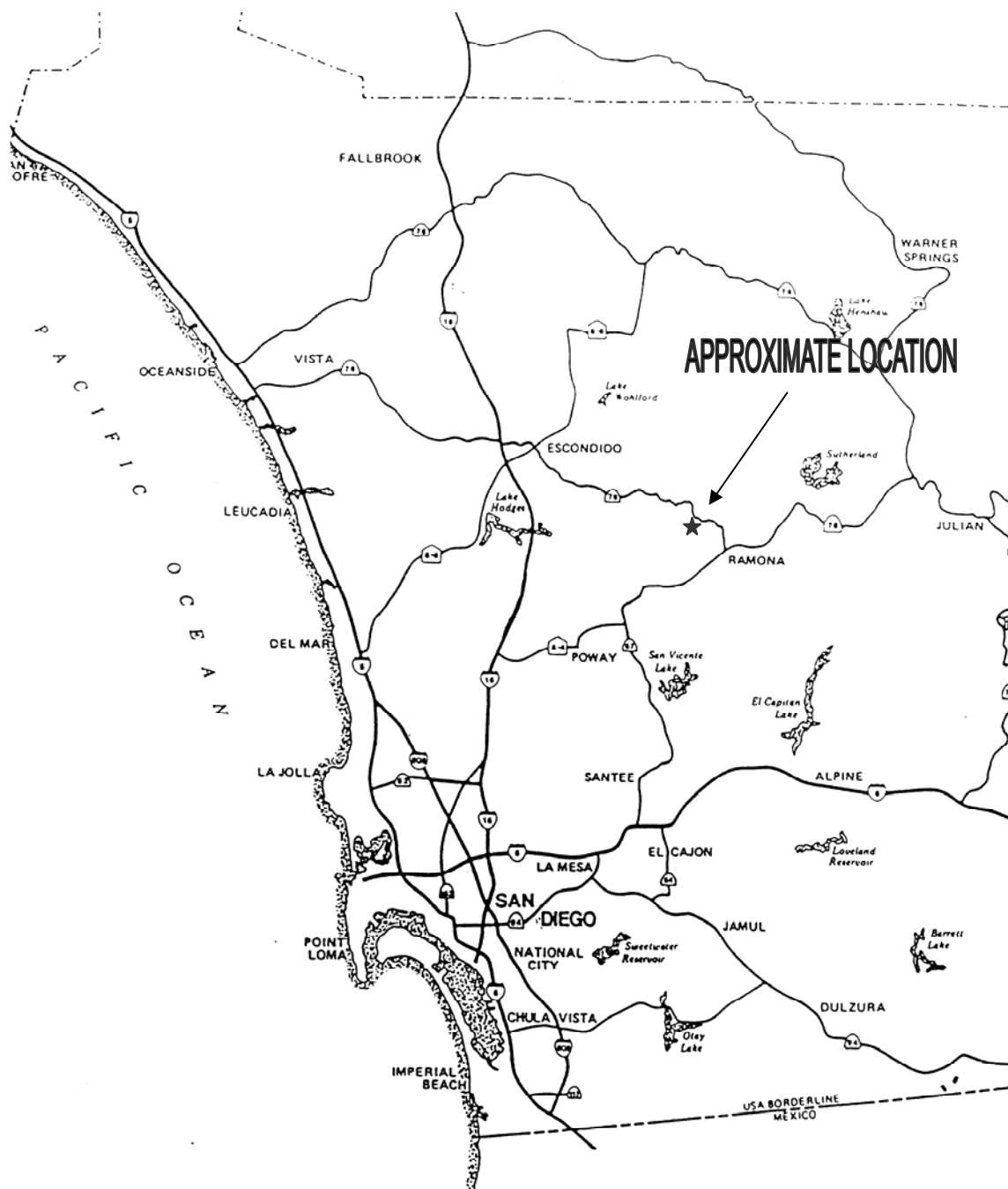
In summary, an evaluation of potential wetlands and waters within possible future development areas on the Montecito Ranch property was completed in 2001, and 2002. This investigation addressed ACOE, CDFG, and County wetlands and drainages through use of ACOE field wetland determination methods, application of CDFG and RPO criteria, and consultation with County biologists. Multiple wetlands and drainages falling under the jurisdiction of one or more of these agencies were documented and are depicted on the attached map. Approximately 13 drainages are considered CDFG waters, 4 are considered Waters of the US and 3 are considered RPO wetlands. The following tables summarize the total of these drainages onsite.

Table 1. Summary of Jurisdictional Areas Onsite			
	ACOE	CDFG	RPO
Waters (linear feet)	5,150 lf	22,715 lf	
Wetlands	0.5 acres	0.8 acres (riparian scrub and agriculture ponds)	3,875 lf and 0.5 acres (agriculture ponds)

Table 2. Summary of Jurisdictional Areas Offsite			
	ACOE	CDFG	RPO
Wetlands	<u>0.24 acres (Riparian scrub)</u>	<u>0.24 acres (Riparian scrub)</u>	<u>0.24 acres (Riparian scrub)</u>

  
 Elyssa K. Robertson  
 Principal  
 REC Consultants Inc.  
 9517 Grossmont Center Drive  
 La Mesa CA 91941

Date 4/28/08



**REC**  
Consultants, Inc.

# **REGIONAL LOCATION MONTECITO RANCH** NO SCALE

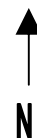
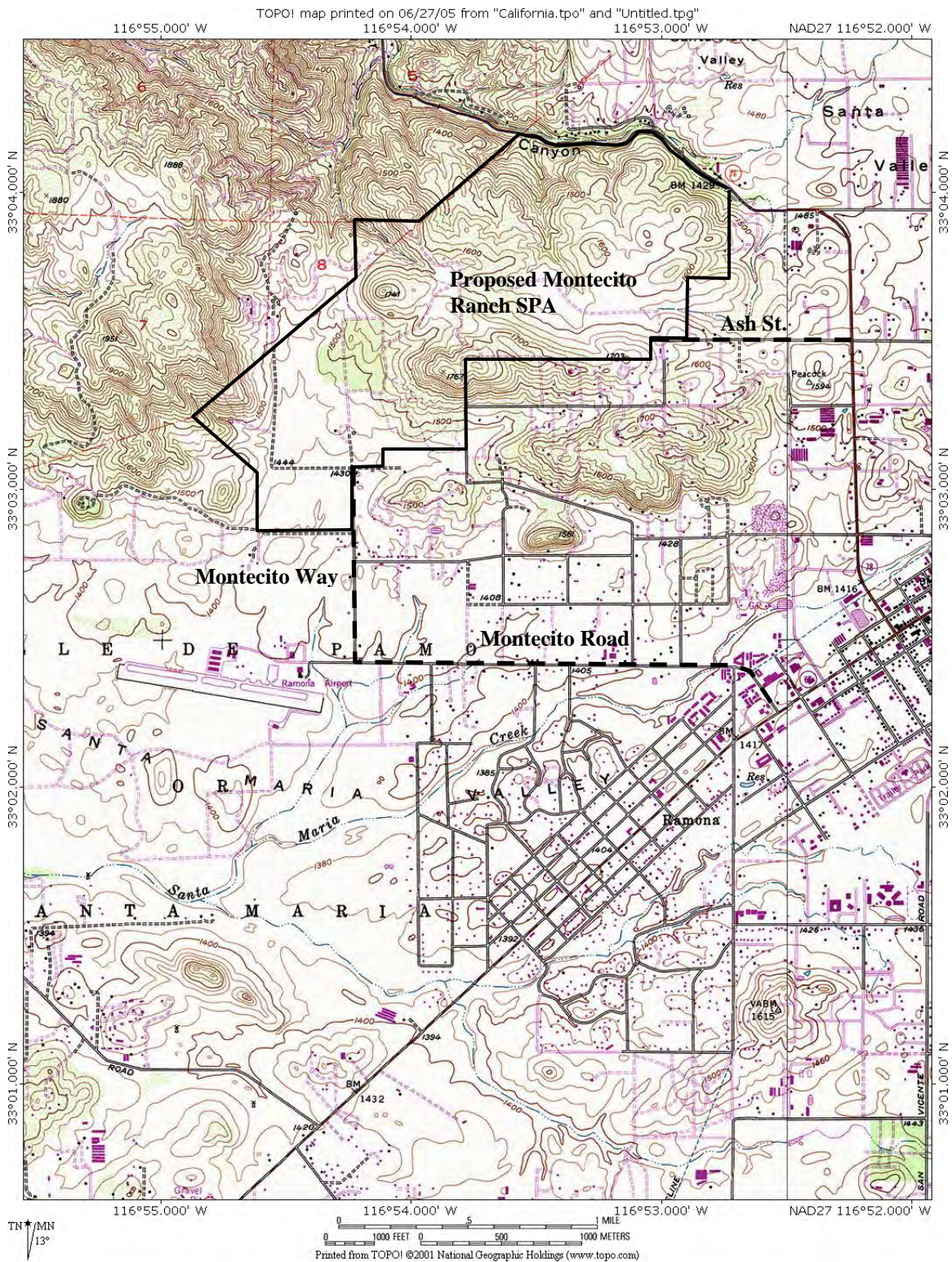
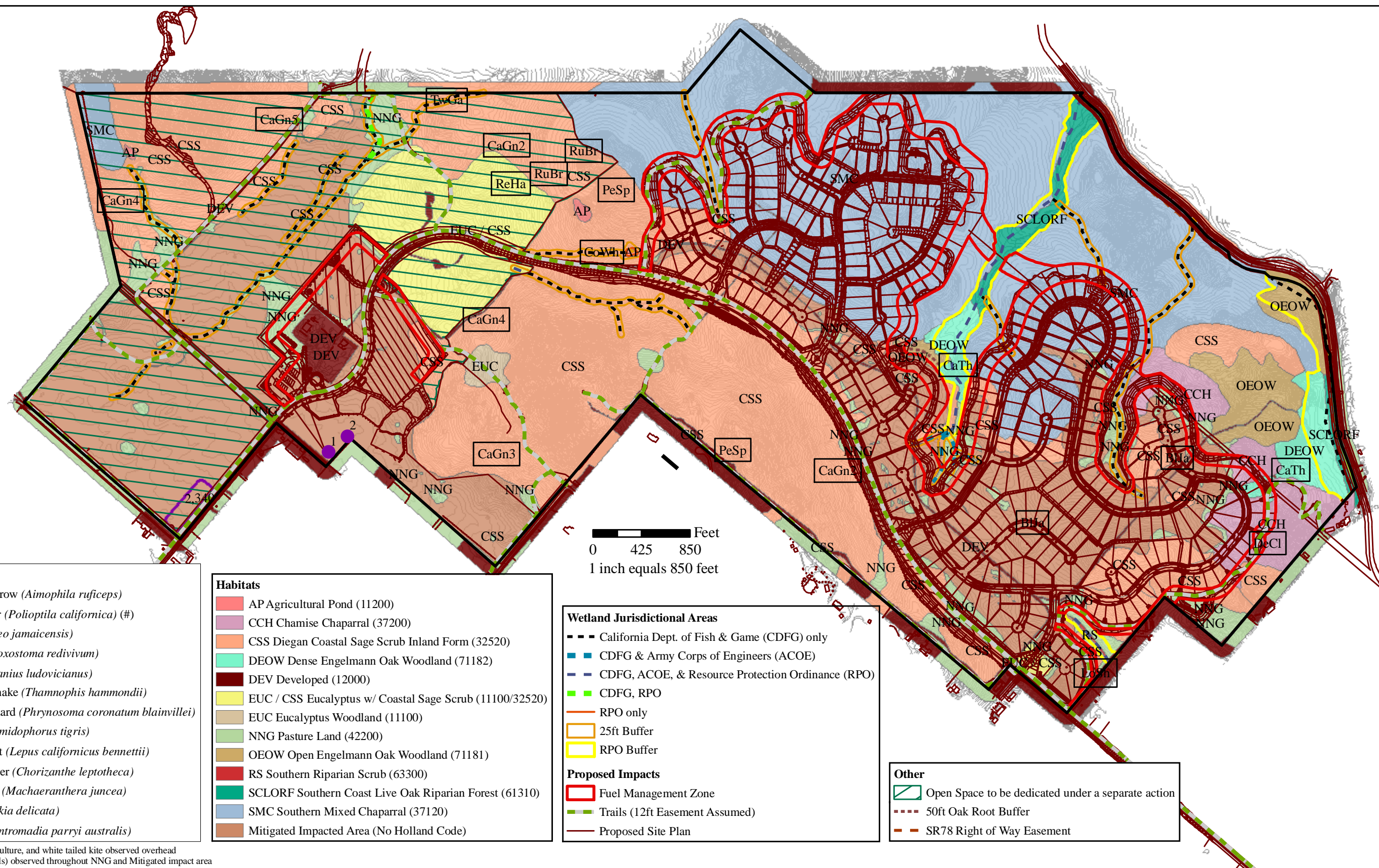


Figure  
1

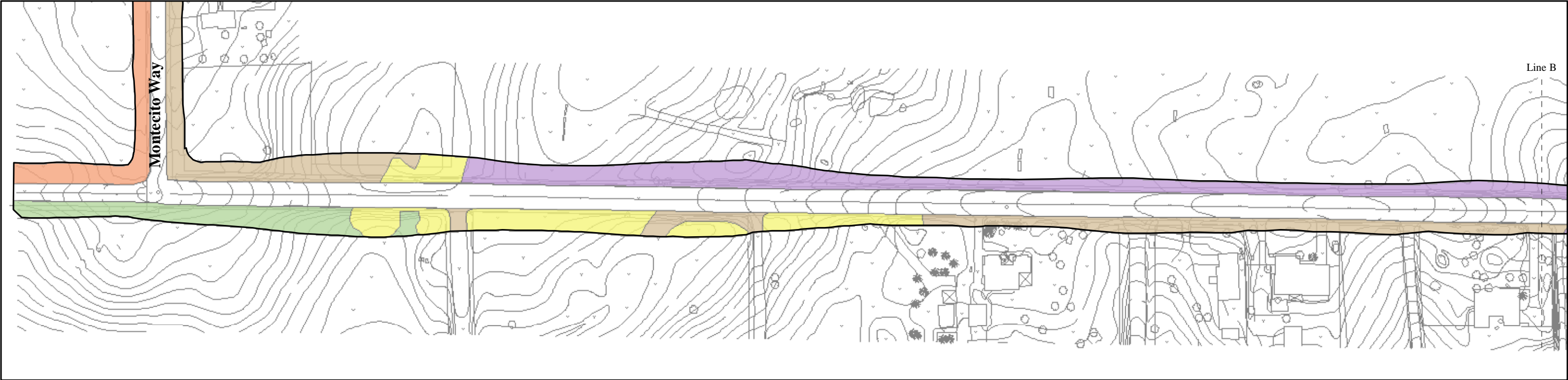




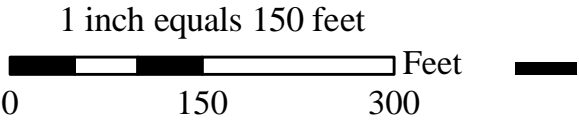








**Montecito Road Widening**

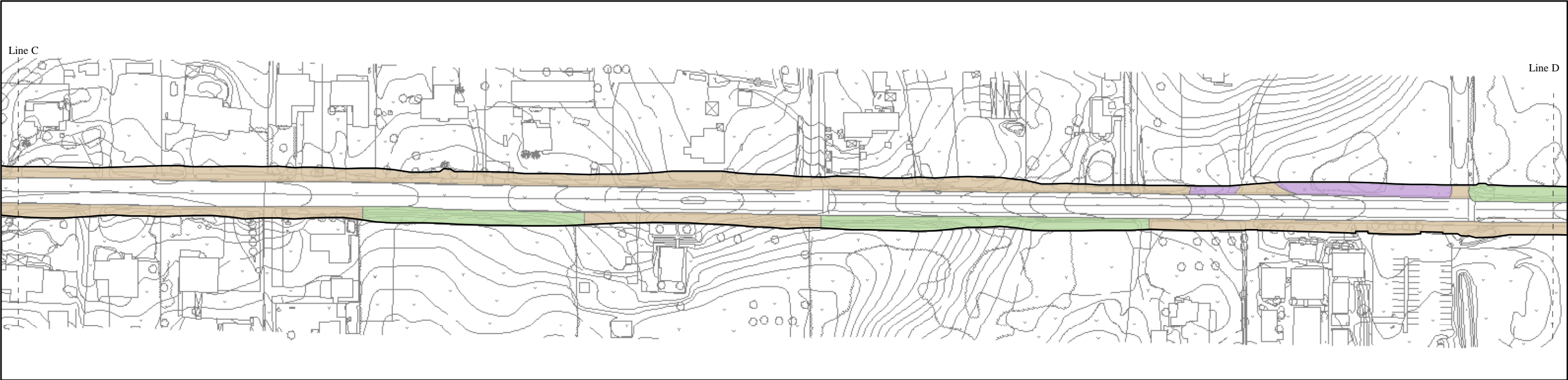


**Montecito Road Widening**  
**Montecito Ranch**

January 2008

- Legend**
- |            |                      |
|------------|----------------------|
| Developed  | Non-Native Grassland |
| Disturbed  | Pasture              |
| Eucalyptus | Riparian Woodland    |
|            | Impact Limit         |
|            | Matchlines           |

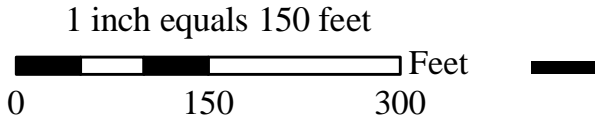
**Figure**  
**4A**



**Montecito Road Widening**



Consultants, Inc.



**Montecito Road Widening**  
**Montecito Ranch**

January 2008

**Legend**

- |              |                      |
|--------------|----------------------|
| Developed    | Non-Native Grassland |
| Disturbed    | Pasture              |
| Eucalyptus   | Riparian Woodland    |
| Impact Limit | Matchlines           |

**Figure**  
**4B**



**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito Ranch</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/16/01</u> County: _____ State: _____
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <input checked="" type="radio"/> Yes  <input type="radio"/> No         </div> <div style="text-align: center;"> <input type="radio"/> Yes  <input checked="" type="radio"/> No         </div> </div> Community ID: _____ Transect ID: _____ Plot ID: <u>1</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Hemizonia <del>conjugens</del> fasciculata</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Ambrosia psilostachya</u>	<u>"</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Avena spp.</u>	<u>"</u>	<u>UPL</u>	11. _____	_____	_____
4. <u>Erodium spp.</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Rumex crispus</u>	<u>"</u>	<u>FACW</u>	14. _____	_____	_____
7. <u>Distichlis spicata</u>	<u>"</u>	<u>FACW</u>	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 43.7

Remarks: Disturbed by agriculture

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>✓ ___ Other</p> <p>___ No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt; 18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt; 18</u> (in.)</p>	<p>Remarks: <u>no hydro indicators</u></p>



**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/16/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>2</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Avena spp</u> <sup>fac.</sup>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Hemizonia conf.</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Rumex crispus</u>	<u>"</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Lolium multiflorum</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Melica frutescens</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 207.

Remarks: Disturbed by agriculture

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;">___ Aerial Photographs</p> <p style="margin-left: 20px;">___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p style="margin-left: 20px;">___ Inundated</p> <p style="margin-left: 20px;">___ Saturated in Upper 12 Inches</p> <p style="margin-left: 20px;">___ Water Marks</p> <p style="margin-left: 20px;">___ Drift Lines</p> <p style="margin-left: 20px;">___ Sediment Deposits</p> <p style="margin-left: 20px;">___ Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p style="margin-left: 20px;">___ Oxidized Root Channels in Upper 12"</p> <p style="margin-left: 20px;">___ Water-Stained Leaves</p> <p style="margin-left: 20px;">___ Local Soil Survey Data</p> <p style="margin-left: 20px;">___ FAC-Neutral Test</p> <p style="margin-left: 20px;">___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt; 18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt; 18</u> (in.)</p>	<p>Remarks: <u>No hydro indicators</u></p>

plot 2, p.2

## SOILS

Map Unit Name (Series and Phase): <u>Same as 1</u>		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5"		10YR 3/2			
5-12"		10YR 3/2			gravelly
12-18		7.5YR 3/1			
<b>Hydric Soil Indicators:</b>					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <u>No hydric indicators</u>					

## WETLAND DETERMINATION

<table><tr><td>Hydrophytic Vegetation Present?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr><tr><td>Hydric Soils Present?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr></table>	Hydrophytic Vegetation Present?	Yes	<u>No</u> (Circle)	Wetland Hydrology Present?	Yes	<u>No</u> (Circle)	Hydric Soils Present?	Yes	<u>No</u> (Circle)	<table><tr><td>Is this Sampling Point Within a Wetland?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr></table>	Is this Sampling Point Within a Wetland?	Yes	<u>No</u> (Circle)
Hydrophytic Vegetation Present?	Yes	<u>No</u> (Circle)											
Wetland Hydrology Present?	Yes	<u>No</u> (Circle)											
Hydric Soils Present?	Yes	<u>No</u> (Circle)											
Is this Sampling Point Within a Wetland?	Yes	<u>No</u> (Circle)											
Remarks: <u>Within ag area.</u>													

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monteato</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/16/01</u> County: _____ State: _____				
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/> No <input checked="" type="radio"/></td> <td style="text-align: center;">Yes <input checked="" type="radio"/> No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/> No <input checked="" type="radio"/></td> <td style="text-align: center;">Yes <input type="radio"/> No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/> No <input type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>
Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/> No <input type="radio"/>				
Yes <input type="radio"/> No <input checked="" type="radio"/>	Yes <input type="radio"/> No <input checked="" type="radio"/>				
Community ID : _____ Transect ID: _____ Plot ID: <u>3</u>					

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Promus diandrus</u>	<u>hub</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Ambrosia psilostachya</u>	<u>"</u>	<u>FAC</u>	10. _____	_____	_____
3. <u>Rumex crispus</u>	<u>"</u>	<u>FACW-</u>	11. _____	_____	_____
4. <u>Avena spp</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Hemizonia conj.</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 40%

Remarks: In middle of "ditch" bed

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;18</u> (in.)</p>	<p>Remarks: <u>no hydro indicators</u></p>

plot 3, p.2

## SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____ Field Observations Confirm Mapped Type? Yes No			
Taxonomy (Subgroup): _____					
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18"		10YR 3/2			occasional rocks
<b>Hydric Soil Indicators:</b>					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <u>no hydric indicators</u>					

## WETLAND DETERMINATION

<div style="display: flex; justify-content: space-between;"><div>Hydrophytic Vegetation Present? Yes <u>No</u> (Circle)</div><div>(Circle)</div></div> <div style="display: flex; justify-content: space-between;"><div>Wetland Hydrology Present? Yes <u>No</u></div><div></div></div> <div style="display: flex; justify-content: space-between;"><div>Hydric Soils Present? Yes <u>No</u></div><div></div></div>	<div style="display: flex; justify-content: space-between;"><div>Is this Sampling Point Within a Wetland?</div><div>Yes <u>No</u></div></div>
Remarks: <u>Ditch or drainage through ag field</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monteale</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/16/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>4</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Avena spp.</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Hordeum vulgare</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
<u>[Ambrosia ps. A. adhya]</u>	<u>"</u>	<u>FAC]</u> *	11. _____	_____	_____
<u>[Distichlis spicata]</u>	<u>"</u>	<u>FACW]</u> *	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-). 07.

Remarks: \* The FAC and FACW spp. are present, but the cultivated grains are dominant.

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>?</u> (in.)</p> <p>Depth to Saturated Soil: <u>?</u> (in.)</p>	<p>Remarks: <u>Couldn't dig full soil pit because of hardness.</u></p>



SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:		Matrix Color	Mottle Colors	Mottle	Texture, Concretions,
Depth (inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.
0-1 1/2"		10YR 2/1			dry mucky mineral

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
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Remarks: Cracked, dry black surface showing between rows of grain.

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <u>Yes</u> <u>No</u> (Circle) Wetland Hydrology Present? <u>Yes</u> <u>No</u> Hydric Soils Present? <u>Yes</u> <u>No</u>	Is this Sampling Point Within a Wetland? <u>Yes</u> <u>No</u> (Circle)
Remarks: <u>Highly disturbed by ag activity.</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monticello</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/16/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>5</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Hordeum vulgare</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Ambrosia psilostachya</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Hemizonia pumila</u>	<u>"</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Lythrum hyssopifolia</u>	<u>"</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Gnaphalium obtusifolium</u>	<u>"</u>	<u>FACW</u>	13. _____	_____	_____
6. <u>Hemizonia conj.</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 507.

Remarks: Disturbed by agriculture

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt; 18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt; 18</u> (in.)</p>	
<p>Remarks: <u>Hydrology disturbed</u></p>	

plot 5, p. 2

# SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-5		10YR 2/2			
5-10		10YR 3/1			
10-18		10YR 3/2			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
--	--

Remarks: profile depths are approximate because changes are gradual gradations

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? <u>Yes</u> No (Circle) Wetland Hydrology Present? <u>Yes</u> No Hydric Soils Present? <u>Yes</u> No	Is this Sampling Point Within a Wetland? <u>Yes</u> No (Circle)
Remarks: <u>Highly disturbed by agriculture</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monteato</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/16/01</u> County: _____ State: _____
Do Normal Circumstances Exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No <input type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>6</u> (same wetland as 5)

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Polygonum arenastrum</u>		<u>FAC</u>	9. _____		
2. <u>Lythrum hyssopifolia</u>		<u>FAC</u>	10. _____		
3. <u>Hernizonia parryi</u>		<u>FAC</u>	11. _____		
4. <u>Hordeum vulgare</u>		<u>UPL</u>	12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75%

Remarks: Ag disturbance

**HYDROLOGY**

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ✓ No Recorded Data Available	<b>Wetland hydrology Indicators:</b> <b>Primary Indicators:</b> ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ✓ Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> ___ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
<b>Field Observations:</b>  Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	Remarks: <u>disturbed hydrology</u>

plot 6, p.2

# SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:		Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Depth (inches)	Horizon				
0-18		10YR 2/1			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
--	--

Remarks:

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	(Circle) Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No
Remarks: <u>ag disturbance</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>7</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium spp.</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Bromus hordeaceus</u>	<u>"</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Juncus dubius</u>	<u>"</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Rumex salicifolius</u>	<u>"</u>	<u>OBL</u>	12. _____	_____	_____
5. <u>Eremocarpus setigerus</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. <u>Hemizonia conferta</u>	<u>"</u>	<u>UPL</u>	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 287.

Remarks: Disturbed area, in ditch.

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;18</u> (in.)</p>	<p>Remarks: <u>In a ditch, banks not scoured.</u></p>

plot 7, p.2

# SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____ Field Observations			
Taxonomy (Subgroup): _____		Confirm Mapped Type? Yes No			
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18		10YR 4/3			
12-18			10YR 4/4		clayey inclusions
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils		
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime			<input type="checkbox"/> Listed on Local Hydric Soils List		
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List		
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <u>No hydric indicators</u>					

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <u>No</u> (Circle)	Is this Sampling Point Within a Wetland? Yes <u>No</u>
Wetland Hydrology Present? Yes <u>No</u>	
Hydric Soils Present? Yes <u>No</u>	
Remarks: <u>upland ditch</u>	



**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____
Do Normal Circumstances Exist on the site? <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span> Is the area a potential Problem Area? <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>8</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium spp.</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Hydrophis celtica</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Bromus hordeaceus</u>	<u>"</u>	<u>FACU-</u>	11. _____	_____	_____
4. <u>Trichostema lanceolatum</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Ambrosia psilostachya</u>	<u>"</u>	<u>FAC</u>	13. _____	_____	_____
6. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 17%

Remarks: Disturbed area, in ditch.

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;">___ Aerial Photographs</p> <p style="margin-left: 20px;">___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p style="margin-left: 20px;">___ Inundated</p> <p style="margin-left: 20px;">___ Saturated in Upper 12 Inches</p> <p style="margin-left: 20px;">___ Water Marks</p> <p style="margin-left: 20px;">___ Drift Lines</p> <p style="margin-left: 20px;">___ Sediment Deposits</p> <p style="margin-left: 20px;">___ Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p style="margin-left: 20px;">___ Oxidized Root Channels in Upper 12"</p> <p style="margin-left: 20px;">___ Water-Stained Leaves</p> <p style="margin-left: 20px;">___ Local Soil Survey Data</p> <p style="margin-left: 20px;">___ FAC-Neutral Test</p> <p style="margin-left: 20px;">___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt; 18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt; 18</u> (in.)</p>	<p>Remarks: <u>In a ditch, banks not scoured.</u></p>

plot 8, p. 2

# SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____			
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No			
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-7		10YR 3/2			
7-18		10YR 3/2	10YR 4/4	includes manganese masses	
<b>Hydric Soil Indicators:</b>					
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils		
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime			<input type="checkbox"/> Listed on Local Hydric Soils List		
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List		
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <u>No hydric indicators (manganese masses too deep)</u>					

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <u>No</u> (Circle)	(Circle)
Wetland Hydrology Present? Yes <u>No</u>	
Hydric Soils Present? Yes <u>No</u>	Is this Sampling Point Within a Wetland? Yes <u>No</u>
Remarks: <u>upland ditch</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monticello</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____
Do Normal Circumstances Exist on the site? Yes <input type="radio"/> No <input checked="" type="radio"/> Is the site significantly disturbed (Atypical Situation)? Yes <input checked="" type="radio"/> No <input type="radio"/> Is the area a potential Problem Area? Yes <input type="radio"/> No <input checked="" type="radio"/> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>9</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium spp.</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Bromus hordeaceus</u>	<u>"</u>	<u>FACW-</u>	10. _____	_____	_____
3. <u>Rumex salicifolius</u>	<u>"</u>	<u>OBL</u>	11. _____	_____	_____
4. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Heliotropium curassavicum</u>	<u>"</u>	<u>OBL</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 40%.

Remarks: Disturbed area in ditch

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):          ___ Stream, Lake, or Tide Gauge          ___ Aerial Photographs          ___ Other  <input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:          Primary Indicators:          ___ Inundated          ___ Saturated in Upper 12 Inches          ___ Water Marks          ___ Drift Lines          ___ Sediment Deposits          ___ Drainage Patterns in Wetlands          Secondary Indicators (2 or more required):          ___ Oxidized Root Channels in Upper 12"          ___ Water-Stained Leaves          ___ Local Soil Survey Data          ___ FAC-Neutral Test          ___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>18</u> (in.)</p>	<p>Remarks: <u>In a ditch, banks not scoured</u></p>

plot 9, p. 2

# SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:		Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
Depth (inches)	Horizon				
0-14		10YR 3/2			
14-18		10YR 3/1	with manganese and		iron masses

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: Mg & Fe masses too deep; no hydric indicators

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <u>No</u> (Circle) Wetland Hydrology Present? Yes <u>No</u> Hydric Soils Present? Yes <u>No</u>	(Circle)  Is this Sampling Point Within a Wetland? Yes <u>No</u>
Remarks: <u>Upland ditch</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monteato</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____
Do Normal Circumstances Exist on the site? _____ Is the site significantly disturbed (Atypical Situation)? <u>Yes</u> <u>No</u> Is the area a potential Problem Area? <u>Yes</u> <u>No</u> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>10</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium spp.</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Brassica nigra</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Ambrosia psilostachya</u>	<u>"</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Rumex salicifolius</u>	<u>"</u>	<u>OBL</u>	12. _____	_____	_____
5. <u>Trichostema lanceolata</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 40.7

Remarks: Cultivated area

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;16</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;16</u> (in.)</p>	<p>Remarks: <u>low area adjacent to ditch/drainage</u></p>

plot 10, p.2

## SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____ Field Observations			
Taxonomy (Subgroup): _____		Confirm Mapped Type? Yes No			
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-16		10YR 2/1			
<b>Hydric Soil Indicators:</b>					
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon			<input checked="" type="checkbox"/> High Organic Content in Surface Layer Sandy Soils		
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime			<input type="checkbox"/> Listed on Local Hydric Soils List		
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List		
<input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <u>hydric, disturbed by agriculture</u>					

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input checked="" type="radio"/> No	Is this Sampling Point Within a Wetland? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle)
Remarks: <u>Heavily disturbed by agriculture</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monte Alto</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table> Community ID: _____ Transect ID: _____ Plot ID: <u>11</u>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Lolium multifl.</u>	<u>h/b</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Erodium sp</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Juncus mexicanus</u>	<u>"</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Eremocarpus setigerus</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Lotus purshianus</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 100%

Remarks: Disturbed by log, "unavoidable" crossing area.

**HYDROLOGY**

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ✓ ___ No Recorded Data Available	Wetland hydrology Indicators: <b>Primary Indicators:</b> ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> ___ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations:  Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>&gt; 18</u> (in.) Depth to Saturated Soil: <u>18</u> (in.)	Remarks: <u>no hydro indicators, banks not scoured.</u>



plot 11, p.2

SOILS

Map Unit Name (Series and Phase): <u>same as 1</u>		Drainage Class: _____ Field Observations Confirm Mapped Type? Yes No			
Taxonomy (Subgroup): _____					
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18		10YR 3/3 - 10YR 3/4 (gradual transition)			
<b>Hydric Soil Indicators:</b>					
<input type="checkbox"/> Histosol		<input type="checkbox"/> Concretions			
<input type="checkbox"/> Histic Epipedon		<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils			
<input type="checkbox"/> Sulfidic Odor		<input type="checkbox"/> Organic Streaking in Sandy Soils			
<input type="checkbox"/> Aquic Moisture Regime		<input type="checkbox"/> Listed on Local Hydric Soils List			
<input type="checkbox"/> Reducing Conditions		<input type="checkbox"/> Listed on National Hydric Soils List			
<input type="checkbox"/> Gleyed or Low-Chroma Colors		<input type="checkbox"/> Other (Explain in Remarks)			
Remarks: <u>Not hydric</u>					

WETLAND DETERMINATION

<table><tr><td>Hydrophytic Vegetation Present?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr><tr><td>Hydric Soils Present?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr></table>	Hydrophytic Vegetation Present?	Yes	<u>No</u> (Circle)	Wetland Hydrology Present?	Yes	<u>No</u> (Circle)	Hydric Soils Present?	Yes	<u>No</u> (Circle)	<table><tr><td>Is this Sampling Point Within a Wetland?</td><td>Yes</td><td><u>No</u> (Circle)</td></tr></table>	Is this Sampling Point Within a Wetland?	Yes	<u>No</u> (Circle)
Hydrophytic Vegetation Present?	Yes	<u>No</u> (Circle)											
Wetland Hydrology Present?	Yes	<u>No</u> (Circle)											
Hydric Soils Present?	Yes	<u>No</u> (Circle)											
Is this Sampling Point Within a Wetland?	Yes	<u>No</u> (Circle)											
Remarks: <u>Upland drainage</u>													

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table> Community ID: _____ Transect ID: _____ Plot ID: <u>12</u>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium spp.</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Rumex salicifolius</u>	<u>"</u>	<u>OBL</u>	10. _____	_____	_____
3. <u>Jussia mexicana</u>	<u>"</u>	<u>FACW</u>	11. _____	_____	_____
4. <u>Melica frutescens</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Eremocarpus pteris</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33.7

Remarks: disturbed upland ditch in CSS

**HYDROLOGY**

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other ✓ No Recorded Data Available	<b>Wetland hydrology Indicators:</b> <b>Primary Indicators:</b> ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Soil Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> ✓ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
<b>Field Observations:</b>  Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>&gt;16"</u> (in.) Depth to Saturated Soil: <u>&gt;16"</u> (in.)	Remarks: <u>ditch or drainage, dead ends.</u>

## SOILS

Hydric Soil Indicators:

☐ Concretions  
☐ High Organic Content in Surface Layer Sandy Soils  
☐ Organic Streaking in Sandy Soils  
☐ Listed on Local Hydric Soils List  
☐ Listed on National Hydric Soils List  
 Other (Explain in Remarks)

Remarks: Oxidized rhizospheres in top 5 inches

Hydrophytic Vegetation Present? Yes No (Circle)  
Wetland Hydrology Present? Yes No  
Hydric Soils Present? Yes No

Is this Sampling Point Within a Wetland? Yes No

Remarks: drainage w/ hydric soils in patch(es).

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monte Carlo</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table> Community ID : _____ Transect ID: _____ Plot ID: <u>13</u>	Yes <input type="radio"/>	No <input type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Polypogon mon.</u>	<u>herb</u>	<u>FACW+</u>	9. _____	_____	_____
2. <u>Lotium multiflorum</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Erodium spp</u>	<u>"</u>	<u>UPL</u>	11. _____	_____	_____
4. <u>Vulpa myuros</u>	<u>"</u>	<u>FACW</u>	12. _____	_____	_____
5. <u>Milica frutescens</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Erigeron madidensis</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 16.7%

Remarks: disturbed upland ditch in CSS

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;18</u> (in.)</p>	<p>Remarks: <u>ditch or drainage, dead-ends</u></p>

plot 13, p. 2

SOILS

Map Unit Name (Series and Phase): <u>same as 12</u>		Drainage Class: _____ Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>			
Taxonomy (Subgroup): _____					
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18	10YR3/2 - 10YR3/4	Gradual transition			
<b>Hydric Soil Indicators:</b>					
___ Histosol			___ Concretions		
___ Histic Epipedon			___ High Organic Content in Surface Layer Sandy Soils		
___ Sulfidic Odor			___ Organic Streaking in Sandy Soils		
___ Aquic Moisture Regime			___ Listed on Local Hydric Soils List		
___ Reducing Conditions			___ Listed on National Hydric Soils List		
___ Gleyed or Low-Chroma Colors			___ Other (Explain in Remarks)		
Remarks: <u>Not hydric in this location (see 12)</u>					

WETLAND DETERMINATION

<div style="display: flex; justify-content: space-between;"><div>Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)</div><div>(Circle)</div></div> <div style="display: flex; justify-content: space-between;"><div>Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)</div><div>(Circle)</div></div> <div style="display: flex; justify-content: space-between;"><div>Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)</div><div>(Circle)</div></div>	<div style="display: flex; justify-content: space-between;"><div>Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)</div><div>(Circle)</div></div>
Remarks:	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____		
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/> Yes Yes</td> <td style="text-align: center;">No <input checked="" type="radio"/> No No</td> </tr> </table>	Yes <input checked="" type="radio"/> Yes Yes	No <input checked="" type="radio"/> No No
Yes <input checked="" type="radio"/> Yes Yes	No <input checked="" type="radio"/> No No		
Community ID: _____ Transect ID: _____ Plot ID: <u>14</u>			

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Brassica nigra</u>	<u>hub</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Rumex salicifolius</u>	<u>"</u>	<u>OBL</u>	11. _____	_____	_____
4. <u>Ambrosia psilostachya</u>	<u>"</u>	<u>FAC</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 07.

Remarks: \* present but only as a minor component

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Soil Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;18</u> (in.)</p>	<p>Remarks: <u>Below man-made dam</u></p>

plot 14, p.2

# SOILS

VsD2 Map Unit Name (Series and Phase): <u>Vista Coarse sandy loam 9-157</u>		→ slopes, eroded Drainage Class: <u>well drained</u> Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>			
Taxonomy (Subgroup): <u>Typic xerochrepts</u>					
Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-18	10YR 3/2				
Hydric Soil Indicators:					
<input type="checkbox"/> Histosol			<input type="checkbox"/> Concretions		
<input type="checkbox"/> Histic Epipedon			<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils		
<input type="checkbox"/> Sulfidic Odor			<input type="checkbox"/> Organic Streaking in Sandy Soils		
<input type="checkbox"/> Aquic Moisture Regime			<input type="checkbox"/> Listed on Local Hydric Soils List		
<input type="checkbox"/> Reducing Conditions			<input type="checkbox"/> Listed on National Hydric Soils List		
<input type="checkbox"/> Gleyed or Low-Chroma Colors			<input type="checkbox"/> Other (Explain in Remarks)		
Remarks: <u>not hydric</u>					

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)	(Circle)
Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)	
Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)
Remarks: _____	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monteato</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____
Do Normal Circumstances Exist on the site? _____ Is the site significantly disturbed (Atypical Situation)? <u>Yes</u> <u>No</u> Is the area a potential Problem Area? <u>Yes</u> <u>No</u> (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: <u>15</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Brassica nigra</u>	<u>herb</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Melica frutescens</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Stachys ajugoides</u>	<u>"</u>	<u>OBL</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33.7.

Remarks: (Below spillway water entrance)

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):          ___ Stream, Lake, or Tide Gauge          ___ Aerial Photographs          ___ Other  <input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Scuff Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;14</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;14</u> (in.)</p>	<p>Remarks: <u>Drainage with scoured banks</u></p>



plot 15, p.2

SOILS

Map Unit Name (Series and Phase): <u>same as 14</u>			Drainage Class: _____		
Taxonomy (Subgroup): _____			Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>		
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-14		10YR3/2			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: Not hydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle) Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle) Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)	Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)
Remarks: _____	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table> Community ID: _____ Transect ID: _____ Plot ID: <u>16</u>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Rumex salicifolius</u> herb		<u>OBL</u>	9. _____		
2. <u>Bromus diandrus</u> "		<u>UPL</u>	10. _____		
3. <u>Erodium</u> sp.		<u>UPL</u>	11. _____		
4. <u>Barbicania</u>		<u>UPL</u>	12. _____		
5. <u>Bromus hordeaceus</u> "		<u>FACW</u>	13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 25.7

Remarks: (In drainage)

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p style="margin-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="margin-left: 20px;">___ Aerial Photographs</p> <p style="margin-left: 20px;">___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p style="margin-left: 20px;">___ Inundated</p> <p style="margin-left: 20px;">___ Saturated in Upper 12 Inches</p> <p style="margin-left: 20px;">___ Water Marks</p> <p style="margin-left: 20px;">___ Soil Lines</p> <p style="margin-left: 20px;">___ Sediment Deposits</p> <p style="margin-left: 20px;">___ Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p style="margin-left: 20px;">___ Oxidized Root Channels in Upper 12"</p> <p style="margin-left: 20px;">___ Water-Stained Leaves</p> <p style="margin-left: 20px;">___ Local Soil Survey Data</p> <p style="margin-left: 20px;">___ FAC-Neutral Test</p> <p style="margin-left: 20px;">___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>NA</u> (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Remarks: <u>couldn't dig very deep because of rocks</u></p>

plot 16, p.2

SOILS

Map Unit Name (Series and Phase): <u>VaA Visalia sandy loam 0-2% slopes</u>		Drainage Class: <u>moderately well</u> Field Observations			
Taxonomy (Subgroup): <u>Pachic Haploxerolls</u>		Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>			
<b>Profile Description:</b>					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	DYR3/2	couldn't dig deeper, extremely hard			

**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input type="checkbox"/> Other (Explain in Remarks)
---	---

Remarks: Not hydric

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle) Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soils Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/> (Circle)
Remarks:	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monticito</u> Applicant/Owner: _____ Investigator: _____	Date: _____ County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID : _____ Transect ID: _____ Plot ID: <u>17</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Juncus mexicanus</u>	<u>hub</u>	<u>FACW</u>	9. _____	_____	_____
2. <u>Eleocharis mac</u>	<u>"</u>	<u>OBL</u>	10. _____	_____	_____
3. <u>Ambrosia psi</u>	<u>"</u>	<u>FAC</u>	11. _____	_____	_____
4. <u>Erodium spp</u>	<u>"</u>	<u>UPL</u>	12. _____	_____	_____
5. <u>Eriogonum set.</u>	<u>"</u>	<u>UPL</u>	13. _____	_____	_____
6. <u>Lotus purshianus</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50.7

Remarks: \_\_\_\_\_

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Ditch Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Remarks: _____</p>

## SOILS

WETLAND DETERMINATION

Approved by HQUSACE 3792

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>18</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Eleocharismacul</u>	<u>herb</u>	<u>OBL</u>	9. _____	_____	_____
2. <u>Lythrum hyssop.</u>	<u>"</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Polypogon mon.</u>	<u>"</u>	<u>FACW+</u>	11. _____	_____	_____
4. <u>Bromus hordeaceus</u>	<u>"</u>	<u>FACW-</u>	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 75.7

Remarks: \_\_\_\_\_

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p><input checked="" type="checkbox"/> Saturated in Upper 12 Inches</p> <p><input checked="" type="checkbox"/> Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p><input checked="" type="checkbox"/> Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>NA</u> (in.)</p> <p>Depth to Saturated Soil: <u>NA</u> (in.)</p>	<p>Remarks: _____</p>

## SOILS

WETLAND DETERMINATION

Approved by HQUSACE 3/92

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
 (1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monticito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> </table>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>19</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Centaurea melitensis</u>	<u>hub</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Eriogonum fasc.</u>	<u>"</u>	<u>UPL</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0 7.

Remarks: \_\_\_\_\_

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Ditch Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;18</u> (in.)</p>	<p>Remarks: <u>drainage</u></p>



## SOILS

## WETLAND DETERMINATION

Approved by HQUSACE 3/92

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>7/17/01</u> County: _____ State: _____						
Do Normal Circumstances Exist on the site? Is the site significantly disturbed (Atypical Situation)? Is the area a potential Problem Area? (If needed, explain on reverse.)	<table style="width: 100%;"> <tr> <td style="text-align: center;">Yes <input checked="" type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input checked="" type="radio"/></td> </tr> <tr> <td style="text-align: center;">Yes <input type="radio"/></td> <td style="text-align: center;">No <input type="radio"/></td> </tr> </table>	Yes <input checked="" type="radio"/>	No <input type="radio"/>	Yes <input type="radio"/>	No <input checked="" type="radio"/>	Yes <input type="radio"/>	No <input type="radio"/>
Yes <input checked="" type="radio"/>	No <input type="radio"/>						
Yes <input type="radio"/>	No <input checked="" type="radio"/>						
Yes <input type="radio"/>	No <input type="radio"/>						
Community ID: _____ Transect ID: _____ Plot ID: <u>20</u>							

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium sp.</u>	<u>hub</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Juncus mexicanus</u>	<u>"</u>	<u>FACW</u>	10. _____	_____	_____
3. <u>Rumex crispus</u>	<u>"</u>	<u>FACW-</u>	11. _____	_____	_____
4. <u>Bromus hordeaceus</u>	<u>"</u>	<u>FACW-</u>	12. _____	_____	_____
5. <u>Ambrosia psilostachys</u>	<u>"</u>	<u>FAC</u>	13. _____	_____	_____
6. <u>Bromus diandrus</u>	<u>"</u>	<u>UPL</u>	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 50%

Remarks: \_\_\_\_\_

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p>___ Stream, Lake, or Tide Gauge</p> <p>___ Aerial Photographs</p> <p>___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p><b>Wetland hydrology Indicators:</b></p> <p><b>Primary Indicators:</b></p> <p>___ Inundated</p> <p>___ Saturated in Upper 12 Inches</p> <p>___ Water Marks</p> <p>___ Drift Lines</p> <p>___ Sediment Deposits</p> <p>___ Drainage Patterns in Wetlands</p> <p><b>Secondary Indicators (2 or more required):</b></p> <p>___ Oxidized Root Channels in Upper 12"</p> <p>___ Water-Stained Leaves</p> <p>___ Local Soil Survey Data</p> <p>___ FAC-Neutral Test</p> <p>___ Other (Explain in Remarks)</p>
<p><b>Field Observations:</b></p> <p>Depth of Surface Water: <u>0</u> (in.)</p> <p>Depth to Free Water in Pit: <u>&gt;18</u> (in.)</p> <p>Depth to Saturated Soil: <u>&gt;18</u> (in.)</p>	<p>Remarks: <u>drainage</u></p>

plot 20, p.2

SOILS

Map Unit Name (Series and Phase): <u>same as 18</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes <input type="radio"/> No <input checked="" type="radio"/>	

Profile Description:		Matrix Color	Mottle Colors	Mottle	Texture, Concretions,
Depth (inches)	Horizon	(Munsell Moist)	(Munsell Moist)	Abundance/Contrast	Structure, etc.
0-3		7.5 YR3/2	with oxidized rhizospheres		
3-12		7.5 YR3/2			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input checked="" type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks: \_\_\_\_\_

WETLAND DETERMINATION

Hydrophytic Vegetation Present? <input checked="" type="radio"/> Yes <input type="radio"/> No (Circle) Wetland Hydrology Present? <input checked="" type="radio"/> Yes <input type="radio"/> No Hydric Soils Present? <input checked="" type="radio"/> Yes <input type="radio"/> No	Is this Sampling Point Within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks:	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/3/02</u> County: <u>San Diego</u> State: <u>CA</u>
Do Normal Circumstances Exist on the site?      Yes      No Is the site significantly disturbed (Atypical Situation)?      Yes      No Is the area a potential Problem Area?      Yes      No (If needed, explain on reverse.)	Community ID : _____ Transect ID: _____ Plot ID: <u>22</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Avena sp.</u>	<u>H</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Brassica nigra</u>	<u>H</u>	<u>UPL</u>	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: upland species

**HYDROLOGY**

<input type="checkbox"/> Recorded Data (Describe in Remarks): <input type="checkbox"/> Stream, Lake, or Tide Gauge <input type="checkbox"/> Aerial Photographs <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Recorded Data Available	<b>Wetland hydrology Indicators:</b> <b>Primary Indicators:</b> <input type="checkbox"/> Inundated <input type="checkbox"/> Saturated in Upper 12 Inches <input type="checkbox"/> Water Marks <input type="checkbox"/> Drift Lines <input type="checkbox"/> Sediment Deposits <input type="checkbox"/> Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input type="checkbox"/> Oxidized Root Channels in Upper 12" <input type="checkbox"/> Water-Stained Leaves <input type="checkbox"/> Local Soil Survey Data <input type="checkbox"/> FAC-Neutral Test <input type="checkbox"/> Other (Explain in Remarks)
<b>Field Observations:</b>  Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: _____	

# SOILS

Map Unit Name (Series and Phase): <u>Bonsall sandy loam, thick surface, 2-97 slopes</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		7.5YR 3/4			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Concretions
<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Listed on National Hydric Soils List
<input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Other (Explain in Remarks)

Remarks:  
No hydric indicators

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No (Circle) Wetland Hydrology Present? Yes <input checked="" type="radio"/> No (Circle) Hydric Soils Present? Yes <input checked="" type="radio"/> No (Circle)	Is this Sampling Point Within a Wetland? Yes <input checked="" type="radio"/> No (Circle)
Remarks:	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/10/02</u> County: <u>San Diego</u> State: <u>CA</u>
Do Normal Circumstances Exist on the site? <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;"><input checked="" type="radio"/> Yes <input type="radio"/> No</span> Is the area a potential Problem Area? <span style="float: right;"><input type="radio"/> Yes <input checked="" type="radio"/> No</span> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>23</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>no plants</u>			9. _____		
2. _____			10. _____		
3. _____			11. _____		
4. _____			12. _____		
5. _____			13. _____		
6. _____			14. _____		
7. _____			15. _____		
8. _____			16. _____		

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): \_\_\_\_\_

Remarks: ag grasses (oats) in nearby area

**HYDROLOGY**

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland hydrology Indicators: <b>Primary Indicators:</b> ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> ___ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
Field Observations: Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: _____ (in.) Depth to Saturated Soil: _____ (in.)	
Remarks: <u>(couldn't dig &gt; 3")</u>	

# SOILS

Map Unit Name (Series and Phase): <u>Bonsall Sandy Loam, thick surface</u>		2-97. Slope A Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-3		10YR/22			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input checked="" type="checkbox"/> Other (Explain in Remarks)
---	---

Remarks: Surface appears to be rock-hard dried muck;  
could it be cow poop or some other organic substance?  
• Loamy mucky mineral

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <u>No</u> (Circle) Wetland Hydrology Present? <u>Yes</u> <u>No</u> (Circle) Hydric Soils Present? <u>Yes</u> <u>No</u> (Circle)	Is this Sampling Point Within a Wetland? <u>Yes</u> No (Circle)
Remarks: <u>A former, disturbed wetland in an actively</u> <u>agged field</u>	



**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/10/02</u> County: <u>San Diego</u> State: <u>CA</u>
Do Normal Circumstances Exist on the site? <span style="float: right;"><input checked="" type="radio"/> Yes <input type="radio"/> No</span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;"><input checked="" type="radio"/> Yes <input type="radio"/> No</span> Is the area a potential Problem Area? <span style="float: right;"><input checked="" type="radio"/> Yes <input type="radio"/> No</span> (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>24</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Avena sp.</u>	<u>H</u>	<u>UPL</u>	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: Helianthemum curvicaule (OBL) present

**HYDROLOGY**

_____ Recorded Data (Describe in Remarks): _____ Stream, Lake, or Tide Gauge _____ Aerial Photographs _____ Other <input checked="" type="checkbox"/> No Recorded Data Available	Wetland hydrology Indicators: <b>Primary Indicators:</b> _____ Inundated _____ Saturated in Upper 12 Inches _____ Water Marks _____ Drift Lines _____ Sediment Deposits _____ Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> <input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12" _____ Water-Stained Leaves _____ Local Soil Survey Data _____ FAC-Neutral Test _____ Other (Explain in Remarks)
Field Observations:  Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>&gt;12</u> (in.) Depth to Saturated Soil: <u>&gt;12</u> (in.)	
Remarks: <u>Low area w/ dark soil</u>	

# SOILS

Map Unit Name (Series and Phase): <u>Bonsall sandy loam, thick surface, 2-97 slopes</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 2/1	-	-	-

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input checked="" type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input checked="" type="checkbox"/> Other (Explain in Remarks)
---	---

Remarks: very disturbed soil, dark surface  
• Loamy mucky mineral

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <u>No</u> (Circle) Wetland Hydrology Present? <u>Yes</u> <u>No</u> (Circle) Hydric Soils Present? <u>Yes</u> <u>No</u> (Circle)	Is this Sampling Point Within a Wetland? <u>Yes</u> No (Circle)
Remarks: <u>Disturbed (former) wetland in actively agged field</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Monteato</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/10/02</u> County: <u>San Diego</u> State: <u>CA</u>
Do Normal Circumstances Exist on the site?      Yes      No Is the site significantly disturbed (Atypical Situation)?      Yes      No Is the area a potential Problem Area?      Yes      No (If needed, explain on reverse.)	Community ID: _____ Transect ID: _____ Plot ID: <u>25</u>

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Avena sp.</u>	<u>H</u>	<u>UPL</u>	9. _____	_____	_____
2. _____	_____	_____	10. _____	_____	_____
3. _____	_____	_____	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 0

Remarks: no hydrophytes observed.

**HYDROLOGY**

___ Recorded Data (Describe in Remarks): ___ Stream, Lake, or Tide Gauge ___ Aerial Photographs ___ Other <input checked="" type="checkbox"/> No Recorded Data Available	<b>Wetland hydrology Indicators:</b> <b>Primary Indicators:</b> ___ Inundated ___ Saturated in Upper 12 Inches ___ Water Marks ___ Drift Lines ___ Sediment Deposits ___ Drainage Patterns in Wetlands <b>Secondary Indicators (2 or more required):</b> ___ Oxidized Root Channels in Upper 12" ___ Water-Stained Leaves ___ Local Soil Survey Data ___ FAC-Neutral Test ___ Other (Explain in Remarks)
<b>Field Observations:</b>  Depth of Surface Water: <u>0</u> (in.) Depth to Free Water in Pit: <u>&gt;6</u> (in.) Depth to Saturated Soil: <u>&gt;6</u> (in.)	Remarks: <u>Similar to 24, but no OR observed.</u>

# SOILS

Map Unit Name (Series and Phase): <u>Borace Cardiacum, thick surface, 2-97 slopes</u>		Drainage Class: _____	
Taxonomy (Subgroup): _____		Field Observations Confirm Mapped Type? Yes No	

Profile Description:					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6		10YR 2/2			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol <input type="checkbox"/> Histic Epipedon <input type="checkbox"/> Sulfidic Odor <input type="checkbox"/> Aquic Moisture Regime <input type="checkbox"/> Reducing Conditions <input type="checkbox"/> Gleyed or Low-Chroma Colors	<input type="checkbox"/> Concretions <input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils <input type="checkbox"/> Organic Streaking in Sandy Soils <input type="checkbox"/> Listed on Local Hydric Soils List <input type="checkbox"/> Listed on National Hydric Soils List <input checked="" type="checkbox"/> Other (Explain in Remarks)
---	--

Remarks:

Loamy mucky mineral

## WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes <u>No</u> (Circle) Wetland Hydrology Present? Yes <u>No</u> (Circle) Hydric Soils Present? <u>Yes</u> No	Is this Sampling Point Within a Wetland? <u>Yes</u> No (Circle)
Remarks: <u>disturbed former wetland in ag field</u>	

**DATA FORM**  
**ROUTINE WETLAND DETERMINATION**  
(1987 COE Wetlands Delineation Manual)

Project/Site: <u>Montecito</u> Applicant/Owner: _____ Investigator: _____	Date: <u>5/10/02</u> County: <u>San Diego</u> State: <u>CA</u>
Do Normal Circumstances Exist on the site? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> Is the site significantly disturbed (Atypical Situation)? <span style="float: right;">Yes <input checked="" type="radio"/> No <input type="radio"/></span> Is the area a potential Problem Area? <span style="float: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></span> (If needed, explain on reverse.)	Community ID: <u>26</u> Transect ID: _____ Plot ID: _____

**VEGETATION**

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1. <u>Erodium sp.</u>	<u>H</u>	<u>UPL</u>	9. _____	_____	_____
2. <u>Eremocarpus setigerus</u>	<u>H</u>	<u>UPL</u>	10. _____	_____	_____
3. <u>Cynodon</u>	<u>H</u>	<u>FAC</u>	11. _____	_____	_____
4. _____	_____	_____	12. _____	_____	_____
5. _____	_____	_____	13. _____	_____	_____
6. _____	_____	_____	14. _____	_____	_____
7. _____	_____	_____	15. _____	_____	_____
8. _____	_____	_____	16. _____	_____	_____

Percent of Dominant Species that are OBL, FACW or FAC (excluding FAC-): 33.7

Remarks: Ambrosia psilostachya, Rumex crispus, Distichlis spicata are present in small quantities

**HYDROLOGY**

<p>___ Recorded Data (Describe in Remarks):</p> <p style="padding-left: 20px;">___ Stream, Lake, or Tide Gauge</p> <p style="padding-left: 20px;">___ Aerial Photographs</p> <p style="padding-left: 20px;">___ Other</p> <p><input checked="" type="checkbox"/> No Recorded Data Available</p>	<p>Wetland hydrology Indicators:</p> <p>Primary Indicators:</p> <p style="padding-left: 20px;">___ Inundated</p> <p style="padding-left: 20px;">___ Saturated in Upper 12 Inches</p> <p style="padding-left: 20px;">___ Water Marks</p> <p style="padding-left: 20px;">___ Drift Lines</p> <p style="padding-left: 20px;">___ Sediment Deposits</p> <p style="padding-left: 20px;">___ Drainage Patterns in Wetlands</p> <p>Secondary Indicators (2 or more required):</p> <p style="padding-left: 20px;"><input checked="" type="checkbox"/> Oxidized Root Channels in Upper 12"</p> <p style="padding-left: 20px;">___ Water-Stained Leaves</p> <p style="padding-left: 20px;">___ Local Soil Survey Data</p> <p style="padding-left: 20px;">___ FAC-Neutral Test</p> <p style="padding-left: 20px;">___ Other (Explain in Remarks)</p>
<p>Field Observations:</p> <p>Depth of Surface Water: _____ (in.)</p> <p>Depth to Free Water in Pit: _____ (in.)</p> <p>Depth to Saturated Soil: _____ (in.)</p>	<p>Remarks: <u>Disturbed by ag activity, ditching, and installation of (sprinkler) pipe.</u></p>

## Map Unit Name

Taxonomy (Subgroup): \_\_\_\_\_

### Field Observations

Confirm Mapped Type?	Yes	No
1. <b>Entity</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. <b>Association</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. <b>Collection</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. <b>Field</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. <b>Method</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. <b>Property</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. <b>Relationship</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. <b>Class</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9. <b>Interface</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. <b>Enum</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. <b>Annotation</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12. <b>Package</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. <b>Module</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. <b>Project</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. <b>Configuration</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. <b>Test</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. <b>Utility</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18. <b>Other</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Profile Description:

[illegible]

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol                    | <input type="checkbox"/> Concretions                                       |
| <input type="checkbox"/> Histic Epipedon             | <input type="checkbox"/> High Organic Content in Surface Layer Sandy Soils |
| <input type="checkbox"/> Sulfidic Odor               | <input type="checkbox"/> Organic Streaking in Sandy Soils                  |
| <input type="checkbox"/> Aquic Moisture Regime       | <input type="checkbox"/> Listed on Local Hydric Soils List                 |
| <input type="checkbox"/> Reducing Conditions         | <input type="checkbox"/> Listed on National Hydric Soils List              |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (Explain in Remarks)                        |

Remarks: Did not do official pit; too trashed. Looked for chunks of dark surface soil w/ OR.

Hydrophytic Vegetation Present?	Yes	No	(Circle)
Wetland Hydrology Present?	Yes	No	
Hydric Soils Present?	Yes	No	

(Circle)

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Remarks: I pulled out the area that had chunks of dark soil w/ OR, and Ambrosia Rumex.

**APPENDIX K**

**RESOURCE MANAGEMENT PLAN**

**RESOURCE MANAGEMENT PLAN  
MONTECITO RANCH, TM 5250, Log # 01-09-013**

**PREPARED FOR:**

**Montecito Ranch LLC  
402 West Broadway, Suite 1320  
San Diego, CA 92101-3542**

**PREPARED BY:**



Consultants, Inc.

**2442 Second Avenue  
San Diego, CA 92101  
(619) 232-9200**

February 2008

A handwritten signature in dark ink, appearing to read "Elyssa Robertson", is written over a horizontal line.

**Elyssa Robertson  
County Certified Biologist**

---

**DPLU/DPR**



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## **I. INTRODUCTION**

### **A. Purpose of Management Plan**

The purpose of this Management Plan is to adequately monitor and maintain the proposed open space that is required for the Montecito Ranch SPA. Approximately 317.66 acres of native and naturalized habitat are proposed to be set aside into open space in addition to 3.8 acres of trails. This is linked to additional open space of 220.5 acres on Montecito Ranch that will be managed under a separate, already approved, Resource Management Plan. A summary table of habitats, impacts and open space is attached.

The Plan will meet the following objectives:

- The plan guides management of habitats, species, and programs described herein to protect and enhance wildlife values.
- The plan serves as a guide for appropriate public uses of the property.
- The plan serves as a descriptive inventory of fish, wildlife and native plant habitats, which occur on or use this property.
- The plan provides an overview of the property's operation, maintenance and personnel requirements to implement management goals, and serves as a budget planning aid.

### **B. Acquisition History**

The 935.2 acre property is located in the County of San Diego, in the unincorporated area of Ramona. The property is currently owned and controlled by Montecito Ranch LLC. Once dedicated, the open space lands will be transferred in fee title to a County of San Diego or Resource Manager.

### **C. Agency Review and Coordination**

The Montecito Ranch project is currently being reviewed and updated as part of the Draft North County MSCP. This plan will go out for review and approval to each Agency once the Environmental Impact Report (EIR) is complete.

## **II. IMPLEMENTATION**

### **A. Responsible Parties/Designation of Manager**

The County of San Diego Department of Parks and Recreation is listed to be the preserve Resource Manager of the property through the Landscape Maintenance District regulations. The procedure for formation and annexation of a Landscape Maintenance District in accordance with County Policy J-37 is described below.

- A. Proceedings to form the District or a zone of that District (Zone) may be initiated by the County, developers, civic groups, or other parties provided that (a) a funding mechanism is provided to cover all County formation costs, whether or not the formation is

successful, and (b) the Director of Public Works or Director of Parks and Recreation, as appropriate, determines that the proposed maintenance through this mechanism is an appropriate use of the District.

- B. Petitions may be initiated by residents, community groups or governmental agencies.
- C. Developers interested in formation must deposit sufficient funds with the County prior to initiation of proceedings to pay for all costs of formation, including balloting and administration, and each proponent is responsible for producing an independent Assessment Engineer's Report prior to formation hearings unless waived pursuant to the act. The County may require a Developer, or a Developer may desire, to annex to the District of a specified zone of the District or to form a zone as a condition of annexation. In such cases, the Developer may be required to provide written consent from all owners of property within the development waiving the notice, hearing and right of protest and consenting to the annexation and zone formation, if any. (Streets and Highways Code §§ 22608, 22608.2)
- D. There is a limited amount of Special District formation funding available, which can be used to assist Developed Communities, and which would be reimbursed upon successful formation and collection of assessments. In general, front funding is limited to \$3,000 per zone, with full reimbursement upon formation and assessment collection.
- E. The purpose of the District and its zones is generally to provide revenue for ongoing maintenance, and not to fund new construction. Community members should follow existing planning methods for new construction. Funding for construction of new facilities will be considered on a case-by-case basis.
- F. In Developed Communities, proponents will follow guidelines provided by the County for formation activities, including:
  - 1. All steering committee meetings must be open to the public, with all affected property owners invited.
  - 2. Provide the County with a community-initiated petition containing valid, non-weighted signatures of significant numbers to represent probable success of formation. Petitions must accurately describe the proposal, including the facilities to be maintained, and the approximate assessments for each property.
- G. Once a petition is received and approved, County staff will bring a Resolution of Intention to the Board and request approval to conduct assessment ballot proceedings, with a hearing date set in accordance with the provisions of Proposition 218.
- H. Proceedings may be initiated by the County in cases where landscaped medians are included as part of a County road improvement project or when the Board of Supervisors determines that is in the public interest to initiate such proceedings.

- I. Ballot results will be tabulated after a Board hearing and the Board of Supervisors may form the zone if there is not a majority protest weighted in accordance with the provisions of Proposition 218.
- J. As a condition of acceptance of maintenance responsibility, the County will require a Developer to provide funds for 24 months of district administration and maintenance costs, or until assessments placed on the tax roll are collected, whichever occurs later. Civic groups forming Zones may obtain loans to cover administrative and maintenance costs prior to County receipt of tax roll assessments.

If the County chooses to not manage this land, the County will require that the following criteria be used in selecting a resource manager:

- Established Conservancy Group or Land Manager
- County Department of Parks and Recreation
- Federal or State Wildlife Agency (U.S. Fish and Wildlife Service, California Department of Fish and Game)
- Federal Land Manager such as Bureau of Land Management
- Manager approved by the County

The manager shall demonstrate experience in the County of San Diego in carrying out habitat monitoring, and shall also demonstrate fiscal stability including preparation of an operational budget for the management of this RMP. Habitat managers shall have at least one staff member with a biological, ecological or wildlife management degree.

Fee title of all separate open space lots shall be transferred to a resource manager, as defined above. If the land is transferred in fee title to a non-governmental entity, a Biological Open Space Easement or Conservation Easement must be dedicated to the County. If the land is transferred to the County or wildlife agencies, no easement dedication is necessary.

## **B. Financial Responsibility/Mechanism**

The financial mechanism to implement this RMP will be a Landscape Maintenance District to the property manager to manage this specific property. The property meets the requirements of this financial mechanism as outlined below:

- a. The land must be located inside a Pre-approved Mitigation Area (PAMA) or proposed PAMA, or otherwise deemed acceptable by the Department of Parks and Recreation. *The Montecito Ranch land is part of the proposed PAMA for the draft North County MSCP Subarea Plan.*
- b. The land must allow for public access. *The property will be able to be accessed via Ash Street and Montecito Way. In addition, numerous dirt roads access portions of the open space as well as proposed trails.*

- c. The land must allow for recreational opportunities such as a trails system. *Montecito Ranch will provide public access trails that connect to trails regionally.*

### **C. Cost Estimate/Budget**

A final cost estimate will be determined by the LMD once established.

## **III. PROPERTY DESCRIPTION**

### **A. Legal Description**

The Montecito Ranch property is a 935.2 acre site located near the community of Ramona, San Diego County. The property can be found on the San Pasqual 7.5' USGS Quad, Range 1 East, Township 13 South. The following table lists the Assessor's Parcel Numbers (APN).

**TABLE 1. Assessor's Parcel Numbers**

279-071-26	279-072-12	280-030-15	280-031-01
279-072-01	279-072-13	279-072-33	280-031-02
279-072-02	279-072-14	279-072-34	280-030-24
279-072-03	279-072-15	279-093-10	280-030-25
279-072-04	279-072-16	279-093-37	280-031-03
279-072-05	279-072-17	279-093-38	280-031-04
279-072-06	279-072-18	280-010-03	280-031-05
279-072-07	279-072-27	280-010-08	280-031-06
279-072-08	279-072-28	280-010-09	280-031-07
279-072-09	279-072-29	280-030-04	281-521-01
279-072-10	279-072-30	280-030-05	281-521-02
279-072-11	279-072-31	280-030-10	281-521-03
280-030-06	279-072-32		

### **B. Geographical Setting**

The Montecito Ranch project is located in the unincorporated town of Ramona, San Diego County (Figure 1 and 2). The property site can be accessed via Main Street (SR 67), north on Montecito Road, and north on Montecito Way. The Montecito Ranch SPA is generally characterized by a broad valley in the central portion of the site with gently sloping terrain to the north. In addition, three distinct knolls are located onsite: one in the southwestern most portion of the site; one adjacent to the northwest project boundary; and the other adjacent to the central southern project boundary. The gently sloping landform transitions with steeper topography associated with Clevenger Canyon, which is located immediately adjacent to the property to the northeast. The property is situated on a drainage divide, with the steep northward drainages emptying into Clevenger Canyon, and the gentle southwest draining canyons and valley draining into the Santa Maria Valley. Elevations onsite vary from approximately 1,750 feet above mean

sea level (AMSL) atop the knoll, located along the central southern property boundary, to approximately 1,420 feet AMSL in the southwestern portion of the project site.

### **C. Property Boundaries and Adjacent Lands**

Immediate surrounding land uses consist of semi-rural and estate residential development to the north, east, and south, and the Lemurian Fellowship religious facility and orchards to the northwest. The 1,027 acre Davis SPA adjoins the Montecito Ranch SPA on the south and west. This property consists of pasturelands with limited development and is owned and managed as a preserve by The Nature Conservancy. The Ramona Airport lies approximately 0.5 mile south of the project site. Existing improvements within the SPA include dirt roads and the Montecito Ranch House. Portions of the SPA have been used for farming of oat hay and cattle grazing.

### **D. Geology, Soils, Climate, Hydrology**

#### Geology and Soils

According to the *Soil Survey of San Diego Area, California* (Bowman, 1973), 21 soil types occur onsite. The most common soils belong to the Cieneba series, and the Fallbrook series. The Cieneba Series consists of excessively drained, very shallow to shallow, coarse, sandy loams formed in material weathered in place from granitic rock. Cieneba soils occur in rolling to mountainous uplands with slopes of 5 to 75 percent. The Fallbrook Series consists of well-drained, moderately deep to deep sandy loams formed in material weathered from granodiorite. Fallbrook soils are on uplands with slopes of 2 to 30 percent. Other onsite soils belong to the Bonsall series, Placentia Series, Ramona series, Visalia series, and Vista series. None of the soils onsite is considered gabbroic or derived from gabbroic soils.

#### Climate

The climate of Ramona can be generally characterized as warm Mediterranean. The annual average precipitation is 17.1 inches with an average annual temperature range from 61 to 91 degrees Fahrenheit.

#### Hydrology

Existing drainage is variable in direction, with overall drainage patterns moving off-site to the north and south. Approximately 56 percent of the site (including the eastern half and areas along the northern boundary) drains to the north through Clevenger Canyon, with this flow entering Santa Ysabel Creek approximately one mile north of the site. This “northern watershed” area incorporates nine distinct drainage basins, with the majority of associated flows originating within the project site. The remaining 44 percent of the site drains approximately one mile south to Santa Maria Creek through several small, unnamed tributaries and as sheet flow.

### **E. Trails**

Numerous dirt trails occur onsite as well as dirt roads. The proposed project links a public trail to the regional trail systems to the north, east and south (see attached figure). The project will have 7.8 miles of multi purpose trails on-site, designed to accommodate outdoor activities such as hiking, horseback riding and bicycling. The proposed trail system includes multi-purpose

community trails within proposed open space (3.8 miles) connecting to existing trails of-site to the northwest and southeast, as well as a community pathway along Montecito Ranch Road and Montecito Way, trails among the residential lots (1.7 miles) and community feeder trails throughout the proposed onsite residential development (2.3 miles). The trails will be 8 feet wide within a 12 foot wide impact area. The trails will be maintained by the Montecito Ranch homeowners Association or LMD once established.

#### **IV. CULTURAL FEATURES**

The cultural resources onsite were analyzed by Heritage Resources. According to the 2006 Archaeological Resources Review Impact Assessment and Preservation Plan for the Montecito Ranch property 545.76 acres (220.5 acres of open space under a separate action, 3.8 acres of trails and 321.46 acres considered here) of the site (63.4%) will be designated as archaeological and biological open space. Fourteen archaeological sites will be preserved as significant resources onsite as they contain important data related to regional prehistory and/or history and are deemed significant according to the California Environmental Quality Act (CEQA). Of those sites thirteen will be included in large open space areas and one site will be preserved as part of the Montecito Ranch House complex. In particular, site SDI-12, 481 contained human remains that are observed significant under CEQA, and the Resource Protection Ordinance (RPO). The identification of human remains onsite SDI-12-481 is relevant to Native American groups and will be notified upon project redesign.

Historical findings on the Montecito Ranch property include outbuildings and landscape features associated with events or patterns of events important to California cultural heritage. In particular the ranch house is significant according to the requirements outlined in CEQA, RPO and the Ramona Community Plan (Heritage Resources, 2006 ).

#### **V. HABITAT AND SPECIES DESCRIPTION**

##### **A. Vegetation Communities, Habitats, and Plant Species**

Eleven different habitat types are described onsite as part of the resource management plan. Each of these habitats is discussed below.

Table 2 lists the habitats and the acres that occur in the open space. An open space map is provided in Figure 3. A complete list of plant observations with common and scientific names is provided in Appendix B.



**TABLE 2. Habitat Occurring in Open Space**

<b>Habitat</b>	<b>Acres Available for Management*</b>
Southern Coast Live Oak Riparian Forest	10.60
Open Engelmann Oak Woodland	18.21
Dense Engelmann Oak Woodland	12.67
Southern Riparian Scrub	0.30
Disturbed Wetland	0.73
Diegan Coastal Sage Scrub	142.72
Southern Mixed Chaparral	101.83
Chamise Chaparral	13.63
Non-native Grassland	7.53
Eucalyptus Woodland	2.36
Developed	4.06
Trails	3.8
<b>Mitigation, impacted area</b>	<b>3.02</b>
<b>TOTAL</b>	<b>321.46</b>

\*Land remaining after previous mitigation and impacts, and TM impacts

## **1. List of communities with description**

### Southern Coast Live Oak Riparian Forest (Habitat Code: 61310) 10.60 Acres

Southern Coast Live Oak Riparian Forest is represented on the Montecito Ranch property, forming a closed-canopy woodland of coast live oak (*Quercus agrifolia*). The understory consists of a mixture of shrubs that include poison oak (*Toxicodendron diversilobum*), elderberry (*Sambucus mexicana*), California rose (*Rosa californica*), and California blackberry (*Rubus ursinus*). This habitat occurs near the middle of the Montecito Ranch property and supports extensive, high quality riparian woodlands that are part of a much larger riparian system of that runs along the northern boundary of the site (Clevenger Canyon, Figure 3). Other species documented in this riparian forest include mugwort (*Artemisia douglasiana*), San Diego sedge (*Carex spissa*), rush (*Juncus* sp.), woodland star (*Lithophragme affine*), coffee fern (*Pellaea andromedifolia*), meadow rue (*Thalictrum fendleri*), and desert grape (*Vitis girdiana*). The southern coast live oak riparian woodland habitat occupies approximately 10.60 acres on the Montecito Ranch property.

### Open Engelmann Oak Woodland (Habitat Code: 71181) 18.21 Acres

The open Engelmann oak woodland habitat occurs on slopes at or near the tops of topographic drainages onsite. This habitat type is an evergreen woodland dominated by Engelmann oak (*Quercus engelmannii*) with an understory of grassland species. This habitat usually occurs on relatively moist sites of fine-textured soils on gentle slopes and valley bottoms. Other characteristic species observed in this habitat onsite include sugar bush (*Rhus ovata*) and coast live oak. Brome grasses (*Bromus spp.*) dominate the understory, accompanied by white sage

(*Salvia apiana*), flat-topped buckwheat (*Eriogonum fasciculatum*), and California sagebrush (*Artemisa californica*). Open Engelmann oak woodland occupies approximately 18.60 acres onsite at the far east end of the Montecito biological open space.

Dense Engelmann Oak Woodland (Habitat Code: 71182) 12.67 Acres

Dense Engelmann oak woodland is similar to open Engelmann oak woodland, but in the dense type, coast live oak is a significant constituent, and tree density is significantly greater. This habitat is typically found in more mesic sites, especially in canyons and can intergrade with coast live oak woodland. On the Montecito Ranch property, this habitat occurs between the open Engelmann oak woodlands and the dense southern live oak riparian woodlands along the northern drainages. Another characteristic species, poison oak, is also abundant in this habitat onsite as are annual grasses (primarily *Bromus spp.*) and wildflowers, such as rancher's fireweed (*Amsinckia menziesii*), miner's lettuce (*Claytonia perfoliata*) and shooting star (*Dodecatheon clevelandii*). This habitat covers approximately 12.67 acres onsite

Southern Riparian Scrub Habitat (Habitat Code: 63300) 0.30 Acres

Southern riparian scrub habitat occupies the blueline drainage that flows toward the eastern side of the site. Vegetation in this drainage includes sparse coverage consisting of mulefat (*Baccharis salicifolia*), narrow-leaved willow (*Salix exigua*), curly dock (*Rumex crispus*), and western ragweed (*Ambrosia psilostachya*). The riparian habitat type covers 0.30 acres onsite.

Disturbed Wetland (Agriculture Ponds) (Habitat Code: 11200) 0.73 Acre

Three man-made agriculture ponds, built for cattle, are categorized as disturbed wetlands. One pond is located west of the homestead, and two are located within Diegan coastal sage scrub habitat in the north central portion of the site. Species found in these wetlands include grass poly (*Lythrum hyssopifolium*), annual beard grass (*Polypogon monspeliensis*), soft chess (*Bromus hordeaceus*), and Mexican speedwell (*Veronica peregrina*). Agriculture ponds occupy 0.73 acre on the Montecito Ranch property.

Diegan Coastal Sage Scrub, Inland Form (Habitat Code: 32520) 142.72 Acres

Diegan coastal sage scrub covers slopes in the southern half of the property and part of the northwestern portion of the site. In addition, much of the understory in the larger eucalyptus woodland contains an understory of coastal sage scrub dominated by coastal sagebrush, black sage, and flat-topped buckwheat. This larger eucalyptus grove is located in the western half of the property and is bordered on the south and west by agricultural fields and on the north and east by Diegan coastal sage scrub.

Low shrubs dominate the Diegan coastal sage scrub community, which typically occurs with low moisture availability. The dominant shrub species observed in this habitat include California sagebrush, California buckwheat, laurel sumac (*Malosma laurina*), and white sage. Matchweed (*Gutierrezia sarothrae*), monkeyflower (*Mimulus aurantiacus*), California broom (*Lotus scoparius*), and black sage (*Salvia mellifera*) occur as shrub co-dominants. Golden-yarrow (*Eriophyllum confertiflorum*), slender sunflower (*Helianthus gracilentus*), cryptantha (*Cryptantha spp.*), and sun cups (*Camissonia sp.*) were observed as herbaceous co-dominants. Portions of the Diegan coastal sage scrub onsite have been disturbed by cattle grazing and

agricultural activity and are dominated by a lower-diversity mix of flat-topped buckwheat and non-native grasses and herbs such as ripgut grass (*Bromus diandrus*) and filaree (*Erodium* sp.).

#### Southern Mixed Chaparral (Habitat Code: 37120) 101.83 Acres

Southern mixed chaparral occurs primarily on the north-facing slopes on the northern half of the site. Southern mixed chaparral is a fire and drought adapted community characterized by a dense growth of evergreen shrubs. Many species of this community are crown- or stump-sprouters that regenerate promptly following burns or other types of disturbances. Onsite, this habitat is limited to northern slopes in the north-central section of the site. The composition and dominant species present in this community vary with slope, soil, and exposure. Typical southern mixed chaparral species found onsite include chamise (*Adenostoma fasciculatum*), Ramona lilac (*Ceanothus tomentosus*), and toyon (*Heteromeles arbutifolia*). Honeysuckle (*Lonicera subspicata*), laurel sumac, scrub oak (*Quercus berberidifolia*), mission manzanita (*Xylococcus bicolor*), and bushrue (*Cneoridium dumosa*) occur as co-dominants. The understory is sparse and dominated by foxtail chess (*Bromus madritensis*), cryptantha, herba impia (*Filago californica*), and other annuals.

#### Chamise Chaparral (Habitat Code: 37210) 13.63 Acres

Portions of the Montecito Ranch site are comprised of chamise chaparral. Chamise chaparral is a habitat type that is a monotypic stand of chamise almost to the exclusion of other species. This habitat occurs adjacent to the southern mixed chaparral onsite and at the eastern portion of the site.

#### Non-native Grassland (Habitat Code: 42200) 7.53 Acres

Where grazing, agriculture, or other disturbance has been degraded native vegetation, non-native grasses and weeds can become the dominant vegetation. Extensive non-native grassland areas onsite are dominated by long-beak filaree (*Erodium botrys*), red-stem filaree (*E. cicutarium*) and non-native grasses, such as oats (*Avena* spp.), ripgut, foxtail chess, Bermuda grass (*Cynodon dactylon*), ryegrass (*Lolium* spp.), and vulpia grass (*Vulpia myuros*).

Mitigated Impacted area (no habitat code)In 2002, approximately 246.92 acres of land on Montecito Ranch underwent agricultural disking. Much of the disked land had either been previously farmed or grazed. During the 2002 disking activity, however, some native habitats identified in 2001, were inadvertently impacted. These lands have regenerated to non-native grasslands and will be managed in accordance with that habitat type.

Two other habitat types are mapped, but are not considered habitats requiring maintenance. These include eucalyptus woodland and disturbed areas.

## **2. Description of quality of community**

The County of San Diego considers nine of the eleven habitats documented onsite sensitive. These include Diegan coastal sage scrub, oak woodlands (open Engelmann oak woodland, dense Engelmann oak woodland, and Southern Coast Live oak woodland), wetlands (riparian scrub, disturbed wetlands), non-native grasslands, chaparral (chamise chaparral and southern mixed chaparral). In addition, there are rock outcrops onsite.

Oak Woodlands (Open Engelmann Oak Woodland (71181), Dense Engelmann Oak Woodland (71182), Southern Coast Live Oak Riparian Forest (61310))

The oak woodlands onsite are well developed with a high quality understory. Many mature oaks at the east end of the property appear to be stressed and dying either due to drought conditions, disease and/or age.

Wetlands (Including Disturbed Wetlands, (11200) and Southern Riparian Scrub (63300))

The riparian and wetland habitats onsite are poor quality. The riparian scrub habitat is in a small eroded drainage at the east end of the property. It is represented by less than five young willows and mulefat. Disturbed wetlands onsite are represented by the abandoned ponds previously used for agricultural purposes. Although not high quality wetlands they do provide a water source for wildlife.

Diegan Coastal Sage Scrub (32520)

On the Montecito Ranch property, Diegan coastal sage scrub habitat provides foraging and nesting habitat for the sensitive California gnatcatcher. This habitat onsite is considered a moderate quality habitat.

Chaparral (Southern Mixed Chaparral (37120) and Chamise Chaparral (37200))

Chaparral habitats including southern mixed chaparral and chamise chaparral are considered an important resource within the County of San Diego for assemblage of a multi habitat preserve in the region. These habitats onsite are dense and considered high quality.

Non-native Grassland (42200)

Non-native grassland habitat provides critical foraging area for resident and migratory raptors. The County of San Diego considers this habitat sensitive. Onsite this habitat occurs in fallow agriculture and pasture fields. This area was tilled as part of an on-going agricultural activity in 2002. Upon review of the property in 2003, 2004 and 2005, all areas tilled have developed into non-native grassland habitat. The Montecito Ranch non-native grasslands are part of a larger, regionally important expanse of grasslands called the Ramona Grasslands.

Rock Outcrops (No Habitat Code)

The County considers rock outcrops a unique microhabitat. Numerous rock outcroppings occur onsite. Rock outcrops add diversity to the vegetation communities by providing a discrete ecological niche for species not found elsewhere in the surrounding habitat. On the Montecito Ranch property, rock outcroppings support a number of fern species such as California cottonfern (*Cheilanthes newberryi*), and California polypody (*Polypodium californicum*), and flowering plants with an affinity for the outcrops, such as brickellbush (*Brickellia californica*), California figwort (*Scrophularia californica*), and skunkbrush (*Rhus trilobata*). These outcrops also provide cover and potential nesting cavities for several wildlife species. Some reptile species are attracted to the sun-warmed surfaces of the rocks, and birds use boulders as perches and vantage points.

### 3. Rare, Threatened or Endangered Species

A list of potential plant species to occur onsite is provided in Appendix D. Five sensitive plant species were identified onsite. These are described below.

#### Peninsular spineflower (*Chorizanthe leptotheca*) (County Group D species)

Peninsular spineflower, an annual herb in the buckwheat family, is a CNPS List 4 species (limited distribution) with an R-E-D (Rarity-Endangerment-Distribution) ranking of 1-2-2 and no state or federal status and a County Group D species. Typical habitat includes chaparral, coastal sage scrub, and lower montane coniferous forest. Threats to this species include development and invasion of non-native grasses. A population of several hundred individuals was found on a hilltop vegetated with sparse Diegan coastal sage scrub, close to the boundary with southern mixed chaparral habitat, and one individual was observed in Diegan coastal sage scrub along the southern property boundary (Figure 3).

#### Delicate clarkia (*Clarkia delicata*) (County Group A species)

Delicate clarkia, an annual herb in the evening primrose family, is a CNPS List 1B species (rare/threatened/endangered in California and elsewhere) with an R-E-D ranking of 2-2-2 and a County Group A species. Habitat for this delicate wildflower includes chaparral and cismontane woodland. Development and road improvement are considered primary threats to populations of this species. One population of approximately 75 individuals was found within chaparral habitat on the eastern side of the property (Figure 3).

#### Rush-like bristleweed (*Machaeranthera juncea*) (County Group D species)

Rush-like bristleweed is an herbaceous perennial member of the Aster family. This CNPS List 4 species (limited distribution) has an R-E-D ranking of 1-1-1 and a County Group D species. This species usually grows in chaparral or Diegan coastal sage scrub. Two colonies of this cryptic yellow-flowered herb, containing approximately 100 and 47 individuals respectively, were found within Diegan coastal sage scrub habitat (Figure 3).

#### Engelmann oak (*Quercus engelmannii*) (County Group D species)

Engelmann oak, a semi-deciduous oak with a distinctive twisted growth pattern and bluish-green leaves, is a CNPS List 4 species (limited distribution) with an R-E-D ranking of 1-2-2 and a County Group D species. This species can occur in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland habitats; the center of its distribution is cismontane San Diego County. Engelmann oaks are sensitive to land management practices, such as fire, and their small, disjunctive woodlands are highly susceptible to extirpation. Individual trees typically live from 50 to 80 years; however, few trees in every woodland may be over 150 years old. Approximately 290 individual Engelmann oak trees were observed onsite. Engelmann oaks occur in the open and dense Engelmann oak woodlands found in the eastern half of the site (Figure 3).

#### Southern Tarplant (*Centromadia parryi* ssp. *australis*) (County Group A species)

Southern tarplant is an annual herb in the Aster family. As a CNPS List 1B species, this plant is considered rare/threatened/endangered in California and elsewhere. This species has an R-E-D of 3-3-2, currently has no state listing, but is considered a federal species of concern. This species is

a County Group A species. The typical habitats for this species are marsh and swamp margins, vernal mesic valley and foothill grasslands, and vernal pools. This species is considered threatened by habitat fragmentation, urbanization, vehicles, and foot traffic. Although disturbed through agricultural activities a population of this species persist onsite in the southwest corner of the property (Figure 3).

Four sensitive species were determined to have a moderate potential to occur onsite, although they were not observed during surveys. These species, Lakeside ceanothus (*Ceanothus cyaneus*), western dichondra (*Dichondra occidentalis*), Mission canyon bluecup (*Githopsis diffusa ssp. filicauli*), and Ramona horkelia (*Horkelia truncata*) are considered to have a moderate likelihood, although they were not observed because isolated individuals could occur deep within very dense areas of chaparral (Lakeside ceanothus and Ramona horkelia) or because the plant occurs in locations that are intrinsically difficult to observe, such as under thick shrubs (western dichondra). Five sensitive plant species were found onsite. These species are not state or federally listed, however, they are considered sensitive by the California Native Plant Society (CNPS 2001) and the County of San Diego. Information on each of these species is provided below. The remaining potential sensitive species were judged to have a low or very low likelihood of occurrence, based on their habitat requirements and/or apparent absence during the extensive plant surveys.

## **B. Wildlife Species**

Montecito Ranch supports a rich wildlife population due to the rich habitat diversity onsite. Ten (10) species of mammals, fifty-six (56) species of birds, five (5) species of reptiles, two (2) species of amphibians, twenty-three (23) species of butterflies, and numerous species of other insects and invertebrates have been recorded on and offsite. A complete list of wildlife observations with common and scientific names is provided in Appendix C.

### **1. List of known species present**

#### Invertebrates

Insect species observed onsite include harvester ant, dragonfly, fly, honeybee, bumblebee, red ant, and 23 species of butterflies. The most abundant butterfly species was Behr's metalmark (*Apodemia mormo virgulti*), common white (*Pontia protodice*), painted lady (*Vanessa cardui*), and Sara orangetip (*Anthocharis sara*). The majority of butterfly activity occurred in the Diegan coastal sage scrub habitat with minimal activity in the non-native grassland. This is due to the highly disturbed nature of the non-native grassland and its dominance by filaree.

#### Amphibians and Reptiles

Two amphibian species were identified onsite: the Pacific chorus frog (*Pseudacris regilla*) and the western toad (*Bufo boreas*). Amphibians were most prevalent adjacent to the agriculture ponds. Reptile species observed onsite include California whipsnake (*Masticophis lateralis*), coastal western whiptail (*Cnemidophorus tigris multiscutatus*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), two-striped garter snake (*Thamnophis hammondi*), and western fence lizard (*Sceloporus occidentalis*).

## Birds

Birds were the most abundant and visible wildlife observed onsite. Fifty-six bird species were recorded during site surveys. The most common species observed include bushtit (*Psaltiriparus minimus*), California towhee (*Pipilo crissalis*), lesser goldfinch (*Carduelis psaltria*), and western meadowlark (*Sturnella neglecta*). Raptor species observed onsite or overhead include American kestrel (*Falco sparverius*), red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), and white-tailed kite (*Elanus leucurus majusculus*). Sensitive birds observed onsite besides the raptor species were the coastal California gnatcatcher (*Poliophtila californica californica*), California thrasher (*Toxostoma redivivum*), loggerhead shrike (*Lanius ludovicianus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and turkey vulture (*Cathartes aura*). Bird activity was most prevalent in the undisturbed habitats of coastal sage scrub and the woodlands onsite.

## Mammals

Eight native mammal species and two domestic species were observed on the property. California ground squirrels (*Spermophilus beecheyi nudipes*) were the most abundant species in the non-native grassland and developed areas. Coyote (*Canis latrans clepticus*), desert cottontail rabbit (*Sylvilagus audubonii*), desert woodrat (*Neotoma sp.*), mule deer (*Odocoileus hemionus fuliginata*), and Dulzura kangaroo rat (*Dipodomys simulans*) were also observed in Diegan coastal sage scrub, non-native grassland, and chaparral habitats. Domestic dogs (*Canis domestica*) were observed in the Diegan coastal sage scrub and non-native grassland habitats, and evidence of horses (*Equus sp.*) was noted in Diegan coastal sage scrub habitat.

## **2. Correlation of species with habitat onsite**

### Oak Woodlands

More than 300 species of vertebrates are known to utilize oak woodland communities in California for reproduction, foraging, nesting, over-wintering, and during migration (Block et al 1990); many more species of invertebrates can be expected to occur within this habitat. An important component of oak woodlands is the standing and fallen dead trees which are utilized by numerous species. The structure and compositions of both the canopy and understory varies as the terrain soils, and elevation changes. Oak woodlands are utilized by song birds, and raptors for foraging perching and nesting and by various species of reptiles and mammals for cover, foraging breeding, and or habitation.

### Wetlands

Wetlands are frequented by numerous species of migratory and locally resident birds. Other species will utilize these habitats for essential life functions such as water intake, foraging, hunting, and cover. These areas also support a number of fish amphibians and diverse invertebrate fauna as well as serving as a local congregation point for other vertebrate species.

### Shrublands

Shrublands include upland habitats such as coastal sage scrub and chaparrals. These habitats exhibit high biodiversity. Vertebrate diversity is relatively high in this vegetation, especially around areas of rock outcrops. The common bird species found in these shrublands include California thrasher, scrub jay, wrenit, and California quail. These communities also support a

number of common mammals such as California pocket mouse, woodrat, brush rabbit, ground squirrel, striped skunk, coyote and reptile species.

#### Annual Grasslands

This habitat can support a diversity of large, medium and small burrowing mammal which in turn provide raptors and larger mammals with foraging opportunities. This area is part of a larger contiguous grassland and agriculture area that is considered important for over-wintering and migratory raptor species.

### **3. Rare, Threatened, or Endangered Species**

Sensitive or special interest wildlife species are those that are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive wildlife species are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive biological resources include USFWS (1996, 1997) and CDFG (2001). Sensitive animal species with the potential to occur onsite were assessed in terms of likelihood to occur based on information gathered during field surveys and from existing reports. Appendix E summarizes the evaluation of potential occurrence for these sensitive animal species. Sensitive species observed onsite are discussed below.

#### Coastal western whiptail (*Cnemidophorus tigris multiscutatus*)

The coastal western whiptail does not have state or federal listing status, but is considered sensitive by the County of San Diego, is usually found in open, semi-arid habitats, woodlands, and streamside areas. One coastal western whiptail was observed onsite in Diegan coastal sage scrub habitat, as shown on Figure 3.

#### San Diego horned lizard (*Phrynosoma coronatum blainvillei*)

The San Diego horned lizard, a regional subspecies of the widespread coast horned lizard, is classified as a federal Species of Concern. This spiny, wide-bodied lizard occurs primarily in Diegan coastal sage scrub communities. Two San Diego coast horned lizards were observed on the Montecito property in Diegan coastal sage scrub habitat. Observation locations are provided on Figure 3.

#### Two-striped garter snake (*Thamnophis hammondi*)

The two-striped garter snake, a state Species of Concern, occurs along fresh water streams. This species prefers permanent streams with rocky bottoms and riparian vegetation. The individual observed on the Montecito Ranch property was found in the Diegan coastal sage scrub habitat. The location of this observation is provided on Figure 3.

#### California Thrasher (*Toxostoma redivivum*)

The locally abundant California thrasher is now considered a Federal Species of Concern. This species occurs in a variety of habitats, including Diegan coastal sage scrub and riparian scrub. Approximately 35 California thrashers were observed onsite during the 2001 surveys.



#### Coastal California Gnatcatcher (*Polioptila californica californica*)

Approximately 20 (twenty) California gnatcatchers were observed onsite. They were distributed as follows: four 'family groups' (pair with two juveniles, pair with three juveniles, pair with two juveniles, and pair with one juvenile) and two pair. The locations of all observations are provided on Figure 3. These results are consistent with the previous focused survey conducted by Dudek and Associates, Inc. in 1998, which located five pairs of California gnatcatcher onsite.

#### Loggerhead Shrike (*Lanius ludovicianus*)

The loggerhead shrike is a federal and state Species of Concern that typically occurs in open areas with scattered shrubs and trees. One individual of this species was observed in Diegan coastal sage scrub habitat onsite, as shown in Figure 3.

#### Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)

The southern California rufous-crowned sparrow, a state Species of Concern, is usually found in Diegan coastal sage scrub, grassland, and open pine-oak woodlands, where it nests on the ground. One individual of this species was observed in Diegan coastal sage scrub habitat on the Montecito Ranch property (Figure 3).

#### Raptors

Fifteen American kestrels (*Falco sparverius*), two red-shouldered hawks, nine turkey vultures and 11 red-tailed hawks (*Buteo jamaicensis*) were observed onsite. not observed on or over the Montecito Ranch site, the Golden Eagle has been observed on Cumming Ranch to the South. Golden Eagles were not observed on Oak Country Estates to the west (Mooney 2005).

#### Black-tailed Jack Rabbit

The San Diego black-tailed jackrabbit is both a state and federal Species of Concern. This species typically occurs in open grassland and sparsely vegetated areas. Five San Diego black-tailed jackrabbits were observed in coastal sage scrub and non-native grassland habitats on the Montecito Ranch property.

An additional 51 sensitive wildlife species, with the potential to occur on and adjacent to the project site, are identified within Appendix E. Four of these species (not including those observed or determined to not be likely be found onsite), Riverside and San Diego fairy shrimp, Quino checkerspot butterfly, and the Stephen's kangaroo rat, were the subject of focused surveys with negative findings and summarized below.

#### Riverside fairy shrimp (*Streptocephalus woottoni*) and San Diego fairy shrimp (*Branchinecta sandiegonesis*)

One agriculture pond held water and provided potential fairy shrimp habitat. Dr. Chuck Black observed the pond while it contained standing water. No fairy shrimp were found therein. In addition, Dudek and Associates, Inc. performed an extensive sampling of the site in 1998. The Dudek survey found no fairy shrimp onsite.

#### Quino checkerspot butterfly (*Euphydryas editha quino*)

A focused survey for the federally endangered quino checkerspot butterfly was conducted onsite by USFWS permitted biologists Denise Moe (permit # TE009390-2) and Elyssa Robertson

(permit #TE786714) in 2001. Suitable habitat, including larval host plants, nectar sources, and hilltops, are available to this species onsite. However, the site has historically been heavily grazed, under active agriculture, and continually disturbed, making it less likely for this species to occur onsite. Although a total of 15 different butterfly species were observed, no Quino checkerspot butterflies were observed on the Montecito project site. The results of the focused survey are presented in the attached report, “Quino Checkerspot Butterfly (*Euphydryas editha quino*) Report on the Montecito Property” (REC 2001). These results are consistent with the previous focused survey conducted by Dudek and Associates, Inc. in 1998, which located larval host plants, nectar sources, and hilltops but no Quino Checkerspot butterflies onsite.

#### Stephen’s kangaroo rat (*Dipodomys stephensii*)

Dudek biologist Philip Behrends, PhD conducted a focused survey for the federally endangered Stephen’s kangaroo rat in 1998. Six potential Stephens’ kangaroo rats were identified in the eastern portion of the site. Further trapping was suspended due to positive identification. This report was reviewed for accuracy and inconsistencies were identified by Michael J. O’Farrell. Michael J. O’Farrell and Tim O’Farrell of O’Farrell Biological Consulting conducted an updated survey in September 2001. O’Farrell found no Stephen’s kangaroo rats onsite. A subsequent genetic analysis of six kangaroo rats collected on the Montecito Ranch conducted by Anthony Metcalf of California State University, San Bernardino revealed that all six specimens are Dulzura kangaroo rat (*Dipodomys simulans*). The results of the genetic analysis are included in an updated report provided by Michael J. O’Farrell and is attached. This study was updated again in 2007 with negative results.

Of the 51 sensitive animal species with a potential to occur onsite, eight have a high potential to occur: Harbison dun skipper (*Euphyes vestris harbisoni*), red-diamond rattlesnake (*Crotalus exsul*), nesting Bell’s sage sparrow (*Amphispiza belli belli*), California horned lark (*Eremophila alpestris actia*), Cooper’s hawk (*Accipiter cooperi*), northern harrier (*Circus cyaneus*), nesting white-tailed kite (*Elanus leucurus*), and San Diego desert wood rat (*Neotoma lepida intermedia*). All of the wildlife species with high potential to occur (except for Cooper’s hawk) have been previously documented onsite (Dudek 1997), as discussed below.

#### Harbison dun skipper (*Euphyes vestris harbisoni*)

Harbison dun skipper butterfly is a non-listed species that is considered sensitive by the County of San Diego. It occurs in a series of scattered and disjunct colonies throughout western San Diego County, extending as far north as the Santa Ana Mountains of Orange County (Orsak 1977). Localities in San Diego County include the vicinity of Dulzura, Flinn Springs, Old Viejas Grade, Otay Mountain, the northern slope of Tecate peak, the Fallbrook area, east of Valley Center, and near San Pasqual (Brown and McGuire 1983). In southern California, the butterfly typically occurs in partially shaded riparian habitats, such as oak woodlands, where a seep or spring provides perennial water for the larval host plant, San Diego sedge (*Carex spissa*) (Brown 1982). According to Dudek & Associates, Inc. (1997), the large riparian woodland that runs north-to-south through the northern central portion of the site supported a substantial population of the butterfly. No Harbison’s dun skippers were observed during the 2001 surveys.

#### Red-diamond rattlesnake (*Crotalus exsul*)

The red-diamond rattlesnake, classified as a state Species of Concern, is a brick red to pinkish tan relative to the western diamondback (*Crotalus atrox*). It ranges from San Bernadino County south through most of Baja California, Mexico (Stebbins 1985). It occurs in desert scrub, thorn scrub, and chaparral habitats below about 1200 meters (4000 feet). A single individual of this species was observed on Montecito Ranch in 1997; however, none were observed during the extensive surveys during 2001.

#### California horned lark (*Eremophila alpestris actia*)

The California horned lark, a state Species of Concern, is resident in open, sparsely vegetated habitats, such as grasslands and pasturelands. Unitt (1984) indicates that this species is a common breeding resident and an abundant migrant and winter visitor in San Diego County. The California horned larks were observed by Dudek & Associates in 1997 in the open grassland/pasture habitat on Montecito Ranch. No California horned larks were observed on the Montecito Ranch property.

#### Bell's sage sparrow

Bell's sage sparrow is a federal and state Species of Concern. This bird is usually found in dense stands of chaparral and scrub. Ten individuals were observed onsite in coastal sage scrub habitat. This species was observed by Dudek and Associates in 1997.

#### Northern Harrier (*Circus cyaneus*), Black-tailed kite, Cooper's Hawk

Raptors are considered state species of Special Concern while nesting. This includes all raptor species including Northern harrier, black-tailed kite and Cooper's hawk. These species were reported from the Montecito Ranch by RECON (1987) or observed in later surveys by Dudek & Associates, Inc. or REC.

#### San Diego Desert Woodrat

The desert woodrat, or San Diego woodrat (ssp. *intermedia*), is a California Species of Special Concern. This woodrat builds nests of twigs in rocky outcrops in dry scrubby habitats. This species was identified by Dudek in 1997. If woodrat nests were identified onsite, whether nests belonged to *N. lepida* or *N. fuscipes* is not clear. However, because this species was previously reported is assumed that at least some nests may belong to desert woodrats.

Twenty-three potential sensitive wildlife species have a moderate potential to occur and are listed as Appendix E.

### **C. Overall Biological Value**

Montecito Ranch supports a wide variety of habitat types making it an important ecological resource in the region. The open space of Montecito Ranch not only provides biological diversity to the County preserve design, but it also abuts the Ramona Grasslands, an area considered to be one of the regions most important raptor foraging areas. The Montecito Ranch open space is considered of high biological value due to the number of sensitive species it supports, the availability of water resources, and open grasslands for raptor foraging.

## **V. MANAGEMENT ELEMENTS AND GOALS**

### **A. Biological Elements: Goals and Tasks**

#### **BIOLOGICAL ELEMENT: Oak Woodlands**

The southern coast live oak riparian forest, open Engelmann oak woodland, and dense Engelmann oak woodland habitat vary in canopy density and are all habitats valuable to the County of San Diego. Preservation in perpetuity by taking active conservation measures are a priority.

A.1 Goal: Maintain high quality woodlands onsite.

A.1.1 Task: Annual removal of exotic plant species.

A.2 Goal: Prevent Degradation of habitats from human activity.

A.2.1 Task: Construct, install and maintain (and/or replace) permanent signs around all boundaries adjacent to privately owned properties.

A.2.2 Task: Annual removal of trash and debris.

#### **BIOLOGICAL ELEMENT: Wetlands**

Wetlands, in general, remain a hot topic for protection and management especially within the xeric climates in southern California. As a result, the southern riparian scrub and disturbed wetland habitats onsite provides a vital water resource important the goals of this plan.

A.3 Goal: Maintain high quality wetlands onsite.

A.3.1 Task: Removal of exotic plant species on an as needed basis assessed every five years.

A.4 Goal: Prevent Degradation of habitats from human activity.

A.4.1 Task: Ensure no dumping, pollutions, or blockage of wetlands occur.

#### **BIOLOGICAL ELEMENT: Coastal Sage Scrub and Chaparral Habitats**

The Diegan coastal sage scrub, southern mixed chaparral, and chamise chaparral habitats are located along the upland slopes onsite and have adapted to low moisture availability. Conservation actions play an important role for these declining habitats.

A.5 Goal: Maintain high quality shrub lands onsite.

A.5.1 Task: Removal of exotic plant species on an as-needed basis assessed every five years.

A.6 Goal: Prevent degradation of habitats from human activity.

A.6.1 Task: Construct, install and maintain (and/or replace) permanent signs around all boundaries adjacent to privately owned properties.

A.6.2 Task: Annual removal of trash and debris.

## **BIOLOGICAL ELEMENT: Non-native Grasslands**

The non-native grasslands onsite are important for their role to the region including small mammal foraging for raptors.

A.7 Goal: Maintain high quality grassland onsite.

A.7.1 Task: Removal of exotic plant species on an as-needed basis assessed every five years.

A.7.2 Task: Removal of non-native predatory wildlife species as needed.

A.8 Goal: Prevent Degradation of habitats from human activity.

A.8.1 Task: Ensure no new trails are created.

A.8.2 Task: Annual removal of trash.

A.8.3 Task: Maintain adequate signage to prevent off-road vehicle activity.

A.8.4 Task: Ensure adequate protection for raptor species from poaching.

## **BIOLOGICAL ELEMENTS: Sensitive Plants**

Sensitive plants play an important role in measuring the quality and diversity of onsite habitat and are valuable resources that remain sensitive to human encroachment activities. Their importance for the management of resources shouldn't be overlooked.

A.9 Goal: Prevent degradation of sensitive plant populations.

A.9.1 Task: The boundary of each sensitive plant population should be mapped every three years

A.9.2 Task: Ensure trails, fuel management, weed control and other activities associated with this plan or with the adjacent development do not impact or degrade the populations.

## **BIOLOGICAL ELEMENTS: Sensitive Wildlife Species**

A.10 Goal: Prevent degradation of habitat for foraging raptors

A.10.1 Task: Protect open habitats from illegal dumping and ensure no illegal impacts to raptors occur (such as nest destruction).

A. 11 Goal: Monitor the population of California gnatcatcher and other sensitive wildlife species onsite.

A.11.1 Task: conduct a California gnatcatcher survey onsite once every five years and document all avian species observed.

## **MANAGEMENT CONSTRAINTS**

Issues that may create management constraints include the presence of California gnatcatchers onsite, raptors, sensitive plant populations and sensitive oak woodlands. To avoid these issues, the populations of raptor and California gnatcatchers and the limits of the sensitive plant populations should be monitored annually and ensure that conflicts do not occur between the resource management goals of this plan.

## **B. Cultural Resources Element: Goals and Tasks**

A total of fourteen sensitive cultural resource sites will be preserved. Of those sites, thirteen will be preserved within the large open space area and one site will be preserved as part of the Montecito Ranch House complex. The thirteen sites are SDI-12, 473, 474, 475, 476H, 480, 481, 484H, 486, 489, 494/9901, 496, 497, and 498. All fourteen sites were determined significant as they contain important regional prehistory and/or history considered under CEQA criteria.

### **ARCHAEOLOGICAL ELEMENT: Thirteen archaeological sites**

Significant archaeological sites were determined by unique archaeological and historical resources as defined by CEQA and the County of San Diego Resource Protection Ordinance (RPO).

B.1 Goal: Protection of thirteen prehistoric sites.

B.1.1 Task: Thirteen of the sites are within open space and twelve of those sites are adequately protected by dense vegetation.

B.1.2 Task: No brushing or thinning, trail development or use of mechanical equipment in the event of a brush fire or for any other purpose will be allowed within 50 meters of the sites.

B.1.3 Task: Interpretive signage at trail heads and monitoring will be used to protect the remaining sensitive resources (Heritage Resources, 2005).

B.2 Goal: Added protection to prehistoric site within grassland.

B.2.1 Task: Annual inspections to ensure that no inadvertent impacts or intentional artifact collecting occurs.

The identification of human remains onsite SDI-12-481 is relevant to Native American groups and will be notified upon project redesign. Five Kumeyaay Bands will be notified: Barona Mesa Grande, San Pasqual, Santa Ysabel, and Viejas, as well as Mr. Steven Banegas of the Kumeyaay Cultural Repatriation Committee and Ms. Carmen Lucas, a Kumeyaay elder.

### **HISTORICAL ELEMENTS: Montecito Ranch House Complex**

B.3 Goal: Preservation and Maintenance of the Montecito Ranch House.

B.3.1 Task: Preparation of detailed Historic Preservation Plan will be completed. Active management directives will be outlined within that report.

B.3.2 Task: Scheduled monitoring of this site based on the requirements set forth in the Historic Preservation Plan.

## **MANAGEMENT CONSTRAINTS**

Management constraints include ensuring that pre-historic sites are adequately protected and do not conflict with the implementation of this plan. Coordination between the lead biological manager and the lead archaeologist will be critical to ensure that conflicts do not occur.

## **C. Public Use Elements: Goals and Tasks**

### **PUBLIC USE ELEMENT: Public Trails**

The open space area will contain a trail system for general public use.

C.1 Goal: Maintain functional trails.

C.1.1 Task: Restrict trespassing beyond the trails through signage, gating and patrolling.

C.2 Goal: Use of open space for passive recreation

C.2.1 Task: Allow for archaeological, historical, and/or environmental organization to conduct scientific research, implement a Watchable Wildlife Program, and coordinate with local schools to utilize the trails.

## **D. Operations Element: Goals and Tasks**

### **OPERATIONS ELEMENT: Properly administer overall management of the property.**

Operations elements consist of the physical facility and grounds maintenance program, which includes administration necessary to maintain orderly and beneficial management of the area, and are described below. In addition the operations of this RMP will ensure that the general stewardship of the open space as addressed in this RMP are met.

The confidentiality of locations of archaeological sites shall be achieved through yearly monitoring of sites to ensure inadvertent impacts or intentional artifact collection is not occurring. An agency archaeologist should provide scheduled monitoring or a qualified individual that can ensure confidentiality must be provided.

D.1 Goal: Maintain accurate business records on expenditures, staff, maintenance, and other administrative duties.

D.1.1 Task: Write and submit annual habitat monitoring reports

D.1.2 Task: Review management plan every 5 years to determine if update is required.

D.1.3 Task: Trash and litter removal

D.1.4 Task: Point source and non-point source water runoff control as needed

D.2 Goal: Maintain regular office hours in order to respond to public requests for information in a timely manner and otherwise conduct business in a normal manner. The LMD will determine the location of the management office and who will operate the office.

## **E. Fire Management Elements: Goals and Tasks**

### **FIRE MANAGEMENT ELEMENT: Manage Wildfire Risk**

The purpose of a fire management element is to prevent the complete devastation of fire within the open space preserve. Tasks to achieve this goal will include ensuring that no illegal encampments become established, that no vehicular trespassing occurs and that no illegal

dumping occurs. In addition, the fuel modification zone between the open space and the housing development will further deter a catastrophic fire event.

E.1 Goal: Protect natural and archaeological resources from wildfire.

E.1.1 Task: Annual or biannual removal of fuel within existing fire breaks.

E.1.2 Task: Ensure adequate signage is provided informing trail users of fire dangers.

E.1.3 Task: Ensure that no illegal encampments become established.

## **F. Biological and Cultural Resources Monitoring Element: Goals and Tasks**

### **BIOLOGICAL ELEMENT: Habitats**

Scheduled maintenance and qualitative and quantitative monitoring of habitats shall be conducted. An annual report summarizing these activities will be submitted to the County at the end of each year.

F.1 Goal: Monitor all habitats onsite.

F.1.1 Task: Map habitats every five years.

F.1.2 Task: Monitor and document all natural impacts annually

F.1.3 Task: Monitor and document all human impacts quarterly per year

### **BIOLOGICAL ELEMENT: Sensitive Species**

Scheduled maintenance, and qualitative and quantitative monitoring of sensitive species shall be conducted. An annual report summarizing these activities will be submitted to the County at the end of each year.

F.2 Goal: Monitor all sensitive habitats

F.2.1 Task: Perform biological surveys every five years for sensitive plants and sensitive wildlife species.

F.2.2 Task: Monitor and document all natural impacts annually.

F.2.3 Task: Monitor and document all human impacts quarterly per year.

### **CULTURAL RESOURCES ELEMENT: Archaeological and Historical sites**

Scheduled monitoring of cultural resources shall be conducted. An annual report summarizing these activities will be submitted to the County at the end of each year.

F.3 Goal: Monitor Archaeological and Historical Sites

F.3.1 Task: Allow Native American access annually

F.3.2 Task: Monitor and document all natural impacts annually

F.3.3 Task: Monitor and document all human impacts quarterly per year



## **VI. OPERATIONS SUMMARY**

### **A. Operations Tasks to Implement Plan**

In summary, the management of the Montecito Ranch open space will require tasks associated with the biological and cultural resources of the property. The primary operation will be maintaining the perimeter signs, trail head signs, removal of exotic plant and animal species, monitoring of sensitive species populations sizes and reporting. The primary management constraint will be coordination between the biological and archaeological management staff to ensure that tasks to be implemented do not impact the other resource.

### **B. Existing Staff and Additional Personnel Needs Summary**

It is not anticipated that full time staff will be needed to implement this plan. The management agency should include the tasks listed above in their overall tasks of managing several properties. Once the preservation plan for the Montecito Ranch house is completed, it may be determined that this will require at a minimum part time staff, and may serve as an information kiosk for the open space preserve.

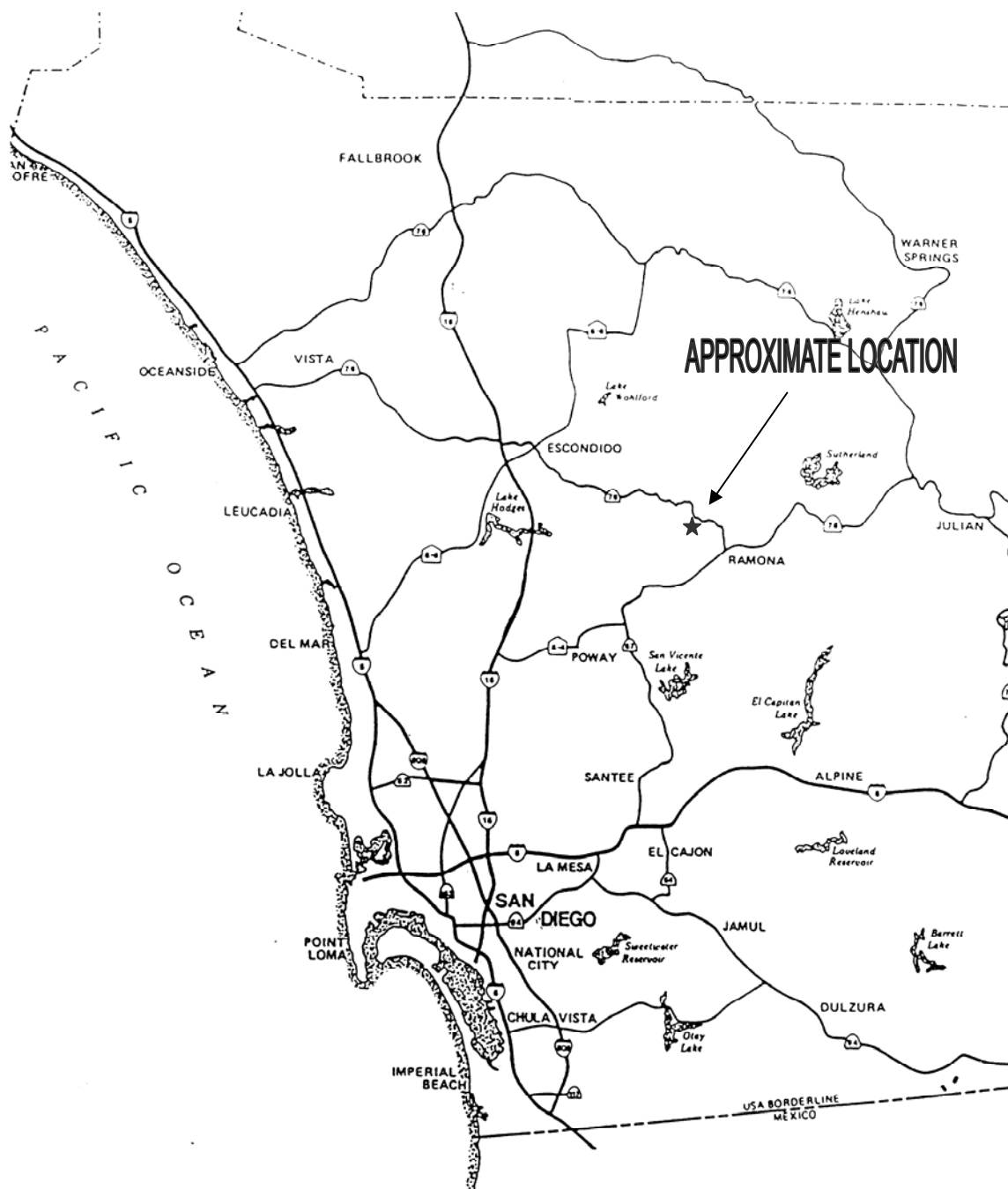
### **C. Operations Summary**

The final costs to implement this RMP and the tasks listed in this RMP will be provided at a future date. The final cost shall be determined in coordination with the LMD and the Department of Parks and Recreation.

## VII. REFERENCES

- AOU. 2000. American Ornithologists' Union. *42nd Supplement to the to the American Ornithologists' Union Check-list of North American Birds*, as published in *The Auk* 117: 847-858.
- CDFG. 2003. State and Federally Listed Endangered and Threatened Animals of California. California Natural Diversity Database, Wildlife and Habitat Data Analysis Brach: online publication, January 2003.
- CDFG. 2003. State and Federally Listed Endangered, Threatened and Rare Plants of California. California Department of Fish and Game California Natural Diversity Database, Wildlife and Habitat Data Analysis Brach: online publication, April 2003.
- CDFG. 2002 California's Plants and Animals: Species of Special Concern. California Department of Fish Habitat Conservation Planning Branch: online publication, 2002
- CDFG. 2003. State and Federally Listed Endangered and Threatened Animals of California. California Natural Diversity Database, Wildlife and Habitat Data Analysis Brach: online publication, January 2003.
- CNDDDB. 2000. California Natural Diversity Data Base RareFind 2 searchable database, California Department of Fish and Game.
- County of San Diego. 1991. Resource Protection Ordinance. Board of Supervisors, County of San Diego.
- County of San Diego. 1997. Multiple Species Conservation Program Sub-Area Plan. Land Use and Planning Group, County of San Diego. October 1997.
- County of San Diego. 2000. Biological Mitigation Ordinance. Ordinance No 8845 and 9246. Revised August 9, 2000.
- County of San Diego. 2002. Biological Resources Mapping Requirements. Department of Planning and Land Use, County of San Diego. June 4, 2002.
- CNPS. 2001a. *Inventory of Rare and Endangered Plants of California* (sixth edition, electronic version). Rare Plant Scientific Advisory Committee, David P. Tibor, convening editor. Sacramento, CA.
- CNPS. 2001b. *Inventory of Rare and Endangered Plants of California* (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA. 338 pp.
- Hall, E.R. 1981 *The Mammals of North America*, 2nd ed.,
- Heritage Resources. August 22, 2005. Archaeological Resources Review, Impact Assessment, and Preservation Plan for the Montecito Ranch.
- Hickman, J. C., ed. 1996. *The Jepson Manual Higher Plants of California*. University of California Press, Berkeley.
- Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-game Heritage Program, State of California Department of Fish and Game, Sacramento.
- Nelson, S.G., F. Sproul. 1991. Biological Assessment, Singing Hills Estates Specific Plan, San Diego County, California. Diamond Bar, CA. (in
- Oberbauer, T. 1996. Terrestrial Communities in San Diego County Based on Holland's Descriptions. San Diego Association of Governments, San Diego, CA.
- Powell, J.A., C.L. Hogue. 1979. *California Insects*. University of California Press, Berkeley.

- Reiser, C. H. 2001. *Rare Plants of San Diego County*.
- Schoenherr, A. G., 1992. *A Natural History of California*. University of California Press: Berkeley and Los Angeles, CA.
- SDNHM. 2001a. San Diego Natural History Museum Checklist of Birds Recorded in San Diego County, ed. P. Unitt. [www.sdnhm.org/research/birds/sdbirds.html](http://www.sdnhm.org/research/birds/sdbirds.html).
- SDNHM. 2001b. San Diego Natural History Museum Checklist of Butterflies of San Diego County, ed. M. Klein. [www.sdnhm.org/research/entomology/sdbutterflies.html](http://www.sdnhm.org/research/entomology/sdbutterflies.html).
- Simpson, M. .G. and J.P. Rebman, 2001. *Checklist of the Vascular Plants of San Diego County*. Third Edition. SDSU Herbarium Press: San Diego, CA.
- Stebbins, R. C. 2003. *Field Guide to Western Reptiles and Amphibian*. Houghton Mifflin Co., Boston. USDA. 1973. *Soil Survey, San Diego Area, California*. United States Department of Agriculture. 104 pp. + appendices.
- USFWS. 2003. Threatened and Endangered Species System Listings by State and Territory. U.S. Fish and Wildlife Service: online publication, May 2003.
- Wilson, D.E. and D.M. Reeder. 1993. *Mammal Species of The World*, 2nd ed.,
- USFWS. 1996. Draft Environmental Assessment, Proposed Otay-Sweetwater Unit, San Diego National Wildlife Refuge. United States Fish and Wildlife Service, Portland, Oregon. November 19996.



**REC**  
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# **REGIONAL LOCATION MONTECITO RANCH** NO SCALE

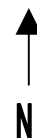
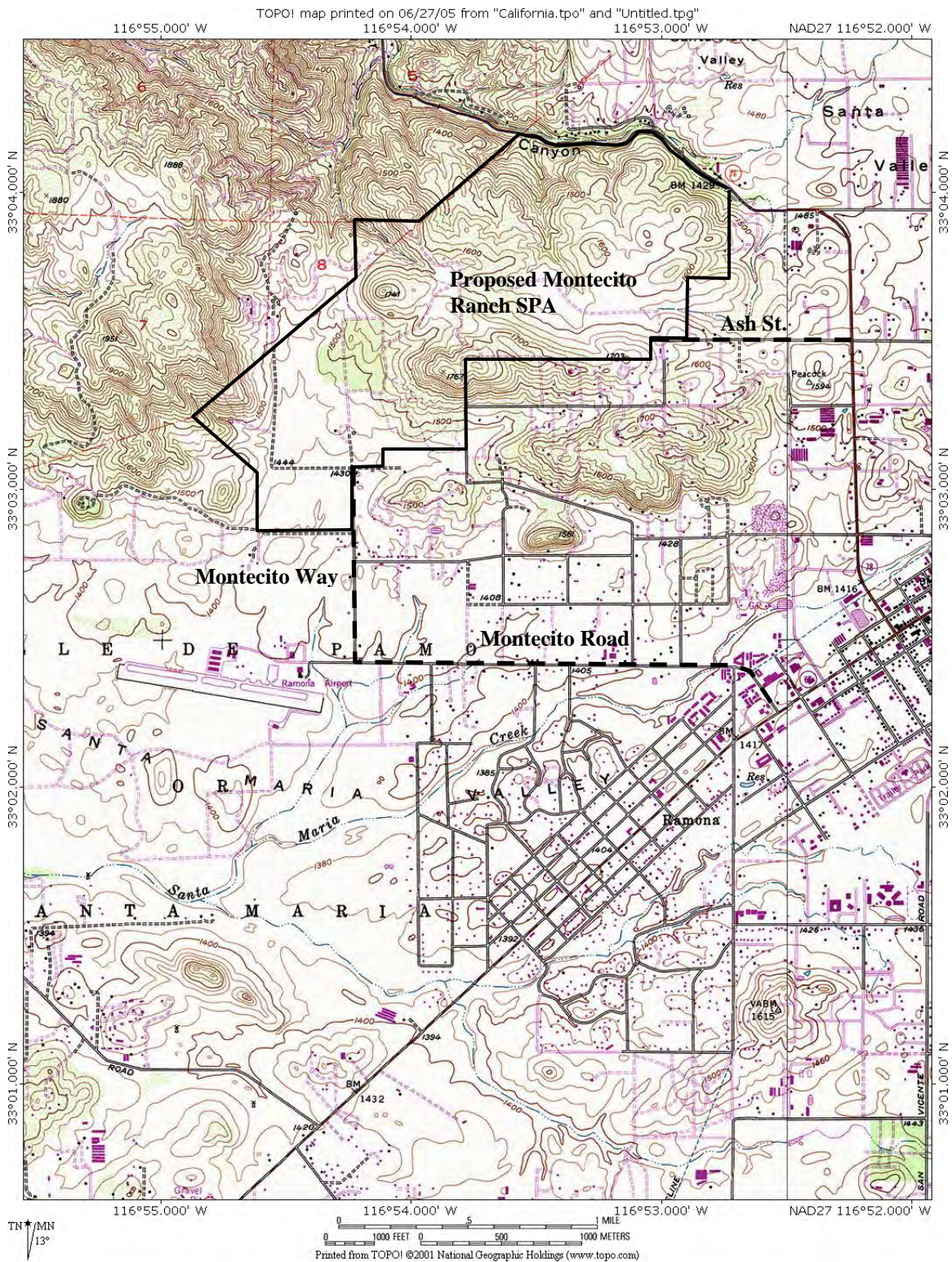
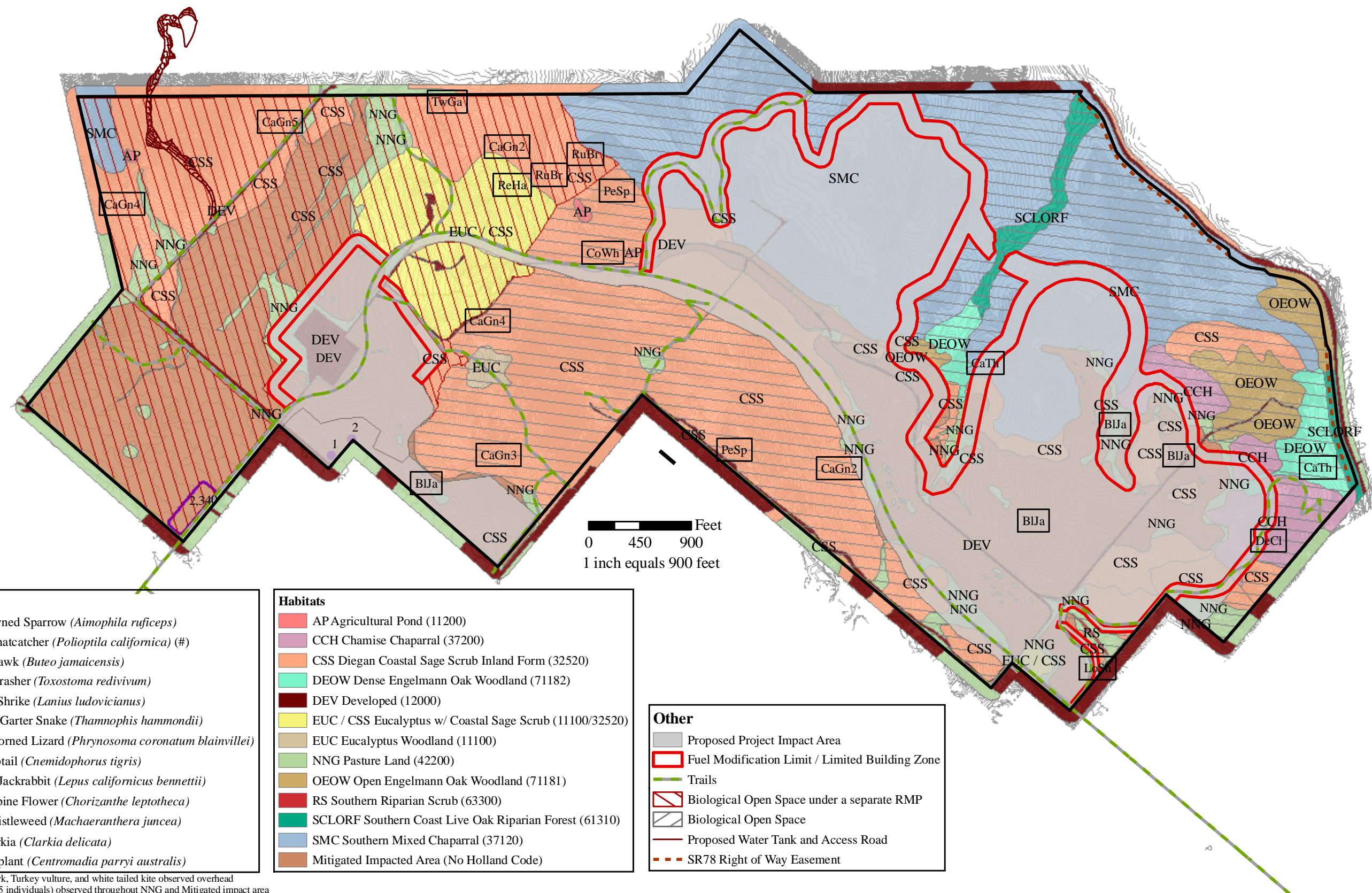


Figure  
1









**OPEN SPACE MAP**  
 Montecito Ranch

**Figure**  
 3



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APPENDIX A PLANT SPECIES OBSERVED ON THE MONTECITO RANCH PROPERTY		
Species	Common Name	Family
<i>Achnatherum coronatum</i>	giant stipa	Poaceae
<i>Acourtia microcephala</i>	sacapellote	Asteraceae
<i>Adenostoma fasciculatum</i>	chamise	Rosaceae
<i>Adiantum jordanii</i>	California maiden-hair	Pteridaceae [Polypodiaceae]
<i>Ailanthus altissima</i> *	tree of heaven	Simaroubaceae
<i>Allium peninsulare</i> var. <i>peninsulare</i>	red-flowered onion	Alliaceae [Liliaceae]
<i>Allophylum glutinosum</i>	blue false-gilia	Polemoniaceae
<i>Ambrosia psilostachya</i>	western ragweed	Asteraceae
<i>Amsinckia menziesii</i> var. <i>menziesii</i>	rigid fiddleneck	Boraginaceae
<i>Anagallis arvensis</i> *	scarlet pimpernel	Primulaceae
<i>Anthemis cotula</i> *	mayweed, stinkweed, dog-fennel	Asteraceae
<i>Antirrhinum coulterianum</i>	Coulter's snapdragon	Scrophulariaceae
<i>Antirrhinum nuttallianum</i> ssp. <i>nuttallianum</i>	Nuttall's snapdragon	Scrophulariaceae
<i>Apiastrum angustifolium</i>	mock parsley	Apiaceae
<i>Artemisia californica</i>	coastal sagebrush	Asteraceae
<i>Artemisia douglasiana</i>	Douglas mugwort	Asteraceae
<i>Asclepias californica</i>	California milkweed, round-hooded milkweed	Asclepiadaceae
<i>Baccharis pilularis</i>	chaparral broom, coyote brush	Asteraceae
<i>Baccharis salicifolia</i>	mulefat, seep-willow	Asteraceae
<i>Baccharis sarothroides</i>	broom Baccharis	Asteraceae
<i>Bloomeria crocea</i> ssp. <i>crocea</i>	common goldenstar	Themidaceae [Liliaceae]
<i>Brassica nigra</i> *	black mustard	Brassicaceae
<i>Brickellia californica</i>	brickellbush	Asteraceae
<i>Bromus diandrus</i> *	ripgut grass	Poaceae
<i>Bromus hordeaceus</i> *	soft chess	Poaceae
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	foxtail chess	Poaceae
<i>Calandrinia ciliata</i>	red maids	Portulacaceae
<i>Calochortus splendens</i>	splendid mariposa lily	Liliaceae
<i>Calochortus weedii</i> var. <i>weedii</i>	Weed's mariposa lily	Liliaceae
<i>Calystegia macrostegia</i>	morning-glory	Convolvulaceae
<i>Camissonia bistorta</i>	California sun cup	Onagraceae
<i>Camissonia californica</i>	false-mustard	Onagraceae
<i>Camissonia hirtella</i>	field sun cup	Onagraceae
<i>Camissonia</i> sp.	sun cup	Onagraceae
<i>Camissonia strigulosa</i>	-	Onagraceae
<i>Carex spissa</i>	San Diego sedge	Cyperaceae
<i>Castilleja affinis</i> ssp. <i>affinis</i>	coast paintbrush	Scrophulariaceae
<i>Castilleja exserta</i> ssp. <i>exserta</i>	purple owl's-clover	Scrophulariaceae
<i>Casuarina</i> sp.	Australian pine	Casuarinaceae
<i>Catalpa</i> sp.*	Catalpa (ornamental)	Bignoniaceae
<i>Caulanthus heterophyllus</i> var. <i>heterophyllus</i>	jewelflower	Brassicaceae
<i>Ceanothus crassifolius</i>	thick-leaf lilac, hoary-leaf-lilac	Rhamnaceae
<i>Ceanothus tomentosus</i>	Ramona-lilac	Rhamnaceae
<i>Centaurea melitensis</i> *	totalote	Asteraceae

Species	Common Name	Family
<i>Centaurium venustum</i>	canchalagua	<i>Gentianaceae</i>
<i>Cerastium glomeratum</i> *	mouse-ear chickweed	<i>Caryophyllaceae</i>
<i>Cercocarpus minutiflorus</i>	San Diego mountain-mahogany	<i>Rosaceae</i>
<i>Chaenactis artemisiifolia</i>	Artemisia pincushion	<i>Asteraceae</i>
<i>Chamaesyce polycarpa</i>	prostrate spurge	<i>Euphorbiaceae</i>
<i>Cheilanthes newberryi</i>	California cottonfern	<i>Pteridaceae</i> [ <i>Polypodiaceae</i> ]
<i>Chenopodium ambrosioides</i> *	Mexican tea	<i>Chenopodiaceae</i>
<i>Chenopodium californicum</i>	California goosefoot	<i>Chenopodiaceae</i>
<i>Chlorogalum parviflorum</i>	soap plant, amole	<i>Hyacinthaceae</i> [ <i>Liliaceae</i> ]
<i>Chorizanthe fimbriata</i> var. <i>fimbriata</i>	fringed spineflower	<i>Polygonaceae</i>
<i>Chorizanthe leptotheca</i> !	Ramona spineflower	<i>Polygonaceae</i>
<i>Cirsium occidentale</i> car. <i>occidentale</i>	cobwebby thistle	<i>Asteraceae</i>
<i>Cistus creticus</i> *	Purple rock-rose	<i>Cistaceae</i>
<i>Clarkia delicata</i> !	delicate Clarkia, Campo Clarkia	<i>Onagraceae</i>
<i>Clarkia epilobioides</i>	canyon godetia	<i>Onagraceae</i>
<i>Clarkia purpurea</i> ssp. <i>viminea</i>	large Clarkia	<i>Onagraceae</i>
<i>Claytonia perfoliata</i> ssp. <i>perfoliata</i>	miner's lettuce	<i>Portulacaceae</i>
<i>Clematis pauciflora</i>	ropevine, small-leaf virgin's bower	<i>Ranunculaceae</i>
<i>Cneoridium dumosum</i>	coast spice bush, bush-rue	<i>Rutaceae</i>
<i>Cnicus benedictus</i> *	blessed thistle	<i>Asteraceae</i>
<i>Crassula connata</i>	pygmy weed	<i>Crassulaceae</i>
<i>Cryptantha intermedia</i>	Nievas Cryptantha	<i>Boraginaceae</i>
<i>Cryptantha micromeres</i>	minute-flower Cryptantha	<i>Boraginaceae</i>
<i>Cryptantha muricata</i>	prickly Cryptantha	<i>Boraginaceae</i>
<i>Cuscuta</i> sp.	dodder	<i>Cuscutaceae</i>
<i>Cynodon dactylon</i> *	Bermuda grass	<i>Poaceae</i>
<i>Datura wrightii</i>	-	<i>Solanaceae</i>
<i>Daucus pusillus</i>	rattlesnake weed	<i>Apiaceae</i>
<i>Deinandra fasciculata</i>	fascicled tarweed	<i>Asteraceae</i>
<i>Delphinium parryi</i> spp. <i>parryi</i>	Parry's larkspur	<i>Ranunculaceae</i>
<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	blue dicks	<i>Themidaceae</i> [ <i>Liliaceae</i> ]
<i>Distichlis spicata</i>	saltgrass	<i>Poaceae</i>
<i>Dodecatheon clevelandii</i> spp. <i>clevelandii</i>	Padre's shooting star	<i>Primulaceae</i>
<i>Dryopteris arguta</i>	coastal wood fern	<i>Dryopteridaceae</i> [ <i>Polypodiaceae</i> ]
<i>Dudleya pulverulenta</i>	Dudleya	<i>Crassulaceae</i>
<i>Eleocharis macrostachya</i>	pale spike-sedge	<i>Cyperaceae</i>
<i>Emmenanthe penduliflora</i>	whispering bells	<i>Hydrophyllaceae</i>
<i>Epilobium canum</i> ssp. <i>canum</i>	California fuschia, zauschneria	<i>Onagraceae</i>
<i>Eremocarpus setigerus</i>	doveweed	<i>Euphorbiaceae</i>
<i>Erigeron foliosus</i> var. <i>foliosus</i>	leafy daisy	<i>Asteraceae</i>
<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i>	California buckwheat	<i>Polygonaceae</i>
<i>Eriogonum fasciculatum</i> var. <i>polifolium</i>	(rosemary flat-top buckwheat)	<i>Polygonaceae</i>



Species	Common Name	Family
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	long-stem golden-yarrow	<i>Asteraceae</i>
<i>Erodium botrys</i> *	long-beak filaree, long-beak storksbill	<i>Geraniaceae</i>
<i>Erodium cicutarium</i> *	red-stem filaree, red-stem storksbill	<i>Geraniaceae</i>
<i>Eschscholzia californica</i>	California poppy	<i>Papaveraceae</i>
<i>Eucalyptus</i> sp.*	Eucalyptus sp.	<i>Myrtaceae</i>
<i>Eucrypta chrysanthemifolia</i> var. <i>chrysanthemifolia</i>	Eucrypta	<i>Hydrophyllaceae</i>
<i>Filago californica</i>	California Filago	<i>Asteraceae</i>
<i>Filago gallica</i> *	narrow-leaf Filago	<i>Asteraceae</i>
<i>Foeniculum vulgare</i> *	sweet fennel	<i>Apiaceae</i>
<i>Galium angustifolium</i> ssp. <i>angustifolium</i>	narrow-leaf bedstraw	<i>Rubiaceae</i>
<i>Galium aparine</i> *	common bedstraw, goose grass	<i>Rubiaceae</i>
<i>Gilia angelensis</i>	grassland Gilia	<i>Polemoniaceae</i>
<i>Gnaphalium bicolor</i>	bicolor cudweed	<i>Asteraceae</i>
<i>Gnaphalium californicum</i>	California everlasting	<i>Asteraceae</i>
<i>Gutierrezia sarothrae</i>	broom matchweed, snakeweed	<i>Asteraceae</i>
<i>Hazardia squarrosa</i> var. <i>grindelioides</i>	sawtooth goldenbush	<i>Asteraceae</i>
<i>Hedypnois cretica</i> *	Crete Hedypnois	<i>Asteraceae</i>
<i>Helianthemum scoparium</i>	peak rush-rose	<i>Cistaceae</i>
<i>Helianthus gracilentus</i>	slender sunflower	<i>Asteraceae</i>
<i>Heliotropium curassavicum</i>	salt heliotrope	<i>Boraginaceae</i>
<i>Heteromeles arbutifolia</i>	toyon, Christmas berry	<i>Rosaceae</i>
<i>Heterotheca grandiflora</i>	telegraph weed	<i>Asteraceae</i>
<i>Hirschfeldia incana</i> *	short-pod mustard	<i>Brassicaceae</i>
<i>Hordeum vulgare</i> var. <i>trifurcatum</i> *	cultivated barley	<i>Poaceae</i>
<i>Hypochaeris glabra</i> *	smooth cat's ear	<i>Asteraceae</i>
<i>Isocoma menziesii</i> var. <i>menziesii</i>	spreading goldenbush	<i>Asteraceae</i>
<i>Juncus bufonius</i>	toad rush	<i>Juncaceae</i>
<i>Juncus mexicanus</i>	Mexican rush	<i>Juncaceae</i>
<i>Juncus textilis</i>	basket rush	<i>Juncaceae</i>
<i>Juncus xiphioides</i>	iris-leaf rush	<i>Juncaceae</i>
<i>Keckiella antirrhinoides</i> var. <i>antirrhinoides</i>	yellow bush penstemon	<i>Scrophulariaceae</i>
<i>Lactuca serriola</i> *	prickly lettuce	<i>Asteraceae</i>
<i>Lamarckia aurea</i> *	goldentop	<i>Poaceae</i>
<i>Lasthenia californica</i>	common goldfields	<i>Asteraceae</i>
<i>Lathyrus vestitus</i> var. <i>alefeldii</i>	San Diego sweet pea	<i>Fabaceae</i>
<i>Lepidium oblongum</i>	peppergrass	<i>Brassicaceae</i>
<i>Lessingia filaginifolia</i> var. <i>filaginifolia</i>	-	<i>Asteraceae</i>
<i>Leymus condensatus</i>	giant wild rye	<i>Poaceae</i>
<i>Linaria canadensis</i>	large blue toadflax	<i>Scrophulariaceae</i>
<i>Lithophragma affine</i>	woodland star	<i>Saxifragaceae</i>
<i>Loeflingia squarrosa</i> var. <i>squarrosa</i>	California Loeflingia	<i>Caryophyllaceae</i>
<i>Lolium perenne</i> *	perennial ryegrass	<i>Poaceae</i>
<i>Lolium</i> sp.*	ryegrass	<i>Poaceae</i>

Species	Common Name	Family
<i>Lomatium utriculatum</i>	common Lomatium	Apiaceae
<i>Lonicera subspicata</i> var. <i>denudata</i>	southern honeysuckle	Caprifoliaceae
<i>Lotus argophyllus</i> var. <i>argophyllus</i>	silver-leaf lotus	Fabaceae
<i>Lotus purshianus</i> var. <i>purshianus</i>	Spanish-clover	Fabaceae
<i>Lotus scoparius</i> var. <i>scoparius</i>	coast deerweed	Fabaceae
<i>Lupinus bicolor</i>	miniature lupine	Fabaceae
<i>Lupinus hirsutissimus</i>	stinging lupine	Fabaceae
<i>Lupinus truncatus</i>	collar lupine	Fabaceae
<i>Lythrum hyssopifolium</i> *	grass poly	Lythraceae
<i>Machaeranthera juncea</i> !	rush chaparral-star, rush-like bristleweed	Asteraceae
<i>Madia exigua</i>	pygmy/threadstem Madia	Asteraceae
<i>Malacothamnus fasciculatus</i>	chaparral bushmallow	Malvaceae
<i>Malosma laurina</i>	laurel sumac	Anacardiaceae
<i>Malva parviflora</i> *	cheeseweed	Malvaceae
<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	wild cucumber, man-root	Cucurbitaceae
<i>Marrubium vulgare</i> *	horehound	Lamiaceae
<i>Medicago polymorpha</i> *	California burclover	Fabaceae
<i>Melica frutescens</i>	tall melic	Poaceae
<i>Melica imperfecta</i>	coast range melic	Poaceae
<i>Mimulus aurantiacus</i>	coast monkey flower	Scrophulariaceae
<i>Mimulus brevipes</i>	slope semiphore	Scrophulariaceae
<i>Mimulus guttatus</i>	seep monkey flower	Scrophulariaceae
<i>Mimulus pilosus</i>	downy monkey flower	Scrophulariaceae
<i>Mirabilis laevis</i> var. <i>crassifolia</i>	coastal wishbone bush	Nyctaginaceae
<i>Muhlenbergia microsperma</i>	littleseed muhly	Poaceae
<i>Muhlenbergia rigens</i>	deergrass	Poaceae
<i>Muilla maritima</i>	common Muilla	Themidaceae [Liliaceae]
<i>Nassella pulchra</i>	purple needlegrass	Poaceae
<i>Navarretia hamata</i> ssp. <i>hamata</i>	hooked skunkweed	Polemoniaceae
<i>Nemophila menziesii</i> var. <i>menziesii</i>	baby blue eyes	Hydrophyllaceae
<i>Nicotiana glauca</i> *	tree tobacco	Solanaceae
<i>Olea europaea</i> *	olive	Oleaceae
<i>Opuntia littoralis</i>	coast prickly-pear	Cactaceae
<i>Osmadenia tenella</i>	Osmadenia	Asteraceae
<i>Oxalis pes-caprae</i> *	Bermuda buttercup	Oxalidaceae
<i>Paeonia californica</i>	California peony	Paeoniaceae
<i>Pectocarya linearis</i> ssp. <i>ferocula</i>	slender Pectocarya	Boraginaceae
<i>Pellaea andromedifolia</i>	coffee fern	Pteridaceae [Polypodiaceae]
<i>Pellaea mucronata</i> var. <i>mucronata</i>	bird's-foot cliff-brake	Pteridaceae [Polypodiaceae]
<i>Pentagramma triangularis</i> ssp. <i>triangularis</i>	California goldenback fern	Pteridaceae [Polypodiaceae]
<i>Phacelia cicutaria</i> var. <i>hispida</i>	caterpillar Phacelia	Hydrophyllaceae
<i>Phacelia parryi</i>	-	Hydrophyllaceae
<i>Phalaris</i> sp.	canary grass	Poaceae
<i>Phoenix canariensis</i> *	Canary Island date palm	Arecaceae
<i>Picris echioides</i> *	bristly ox-tongue	Asteraceae
<i>Pinus</i> sp.	pine (ornamental)	Pinaceae
<i>Plantago elongata</i>	plantain	Plantaginaceae

Species	Common Name	Family
<i>Plantago erecta</i>	plantain	<i>Plantaginaceae</i>
<i>Platanus racemosa</i>	western sycamore	<i>Platanaceae</i>
<i>Polygonum arenastrum</i> *	common knotweed, doorweed	<i>Polygonaceae</i>
<i>Polypodium californicum</i>	California polypody	<i>Polypodiaceae</i>
<i>Polypogon monspeliensis</i> *	annual beard grass	<i>Poaceae</i>
<i>Populus fremontii</i> ssp. <i>fremontii</i>	western cottonwood	<i>Salicaceae</i>
<i>Porophyllum gracile</i>	odora	<i>Asteraceae</i>
<i>Potentilla glandulosa</i> ssp. <i>glandulosa</i>	sticky cinquefoil	<i>Rosaceae</i>
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	holly-leaf cherry, islay	<i>Rosaceae</i>
<i>Pterostegia drymarioides</i>	granny's hairnet	<i>Polygonaceae</i>
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	coast live oak	<i>Fagaceae</i>
<i>Quercus berberidifolia</i>	scrub oak	<i>Fagaceae</i>
<i>Quercus engelmannii</i> !	Engelmann/mesa blue oak	<i>Fagaceae</i>
<i>Rafinesquia californica</i>	California chicory	<i>Asteraceae</i>
<i>Raphanus sativus</i> *	wild radish	<i>Brassicaceae</i>
<i>Rhamnus crocea</i>	spiny redberry	<i>Rhamnaceae</i>
<i>Rhamnus ilicifolia</i>	holly-leaf redberry	<i>Rhamnaceae</i>
<i>Rhus ovata</i>	sugar bush	<i>Anacardiaceae</i>
<i>Rhus trilobata</i>	skunkbrush, pubescent basketbush	<i>Anacardiaceae</i>
<i>Ribes indecorum</i>	white flower currant	<i>Grossulariaceae</i>
<i>Rorippa nasturtium-aquaticum</i>	water-cress	<i>Brassicaceae</i>
<i>Rosa californica</i>	California rose	<i>Rosaceae</i>
<i>Rubus ursinus</i>	California blackberry	<i>Rosaceae</i>
<i>Rumex conglomeratus</i> *	whorled dock	<i>Polygonaceae</i>
<i>Rumex crispus</i> *	curly dock	<i>Polygonaceae</i>
<i>Rumex salicifolius</i> var. <i>denticulatus</i>	willow dock	<i>Polygonaceae</i>
<i>Salix exigua</i>	narrow-leaf willow	<i>Salicaceae</i>
<i>Salix gooddingii</i>	Goodding's black willow	<i>Salicaceae</i>
<i>Salix laevigata</i>	red willow	<i>Salicaceae</i>
<i>Salsola tragus</i> *	Russian thistle, tumbleweed	<i>Chenopodiaceae</i>
<i>Salvia apiana</i>	white sage	<i>Lamiaceae</i>
<i>Salvia columbariae</i>	chia	<i>Lamiaceae</i>
<i>Salvia mellifera</i>	black sage	<i>Lamiaceae</i>
<i>Sambucus mexicana</i>	blue elderberry	<i>Caprifoliaceae</i>
<i>Sanicula arguta</i>	sharp-tooth sanicle	<i>Apiaceae</i>
<i>Sanicula crassicaulis</i>	Pacific sanicle	<i>Apiaceae</i>
<i>Schinus molle</i> *	Peruvian pepper tree	<i>Anacardiaceae</i>
<i>Scrophularia californica</i> ssp. <i>floribunda</i>	California bee plant, California figwort	<i>Scrophulariaceae</i>
<i>Scutellaria tuberosa</i>	Danny's skullcap	<i>Lamiaceae</i>
<i>Selaginella bigelovii</i>	Bigelow's spike-moss	<i>Selaginellaceae</i>
<i>Sidalcea malvaeflora</i> ssp. <i>sparsifolia</i>	checker-bloom	<i>Malvaceae</i>
<i>Silene gallica</i> *	common catchfly	<i>Caryophyllaceae</i>
<i>Silybum marianum</i> *	milk thistle	<i>Asteraceae</i>
<i>Sisymbrium irio</i> *	London rocket	<i>Brassicaceae</i>
<i>Sisymbrium orientale</i> *	hare's-ear cabbage	<i>Brassicaceae</i>
<i>Sisyrinchium bellum</i>	blue-eyed-grass	<i>Iridaceae</i>
<i>Sonchus sp.</i> *	sow-thistle	<i>Asteraceae</i>

Species	Common Name	Family
<i>Spergula arvensis</i> spp. <i>arvensis</i> *	stickwort, starwort	<i>Caryophyllaceae</i>
<i>Spergularia bocconii</i> *	Buccone's sand-spurry	<i>Caryophyllaceae</i>
<i>Stachys ajugoides</i> var. <i>rigida</i>	hedge-nettle	<i>Lamiaceae</i>
<i>Stellaria media</i> *	common chickweed	<i>Caryophyllaceae</i>
<i>Stephanomeria exigua</i> ssp. <i>exigua</i>	small wreath-plant	<i>Asteraceae</i>
<i>Stylocline gnaphaloides</i>	everlasting nest straw	<i>Asteraceae</i>
<i>Tamarix</i> sp.*	tamarisk, salt-cedar	<i>Tamaricaceae</i>
<i>Taraxacum officinale</i> *	common dandelion	<i>Asteraceae</i>
<i>Thalictrum fendleri</i> var. <i>polycarpum</i>	Fendler's meadow-rue	<i>Ranunculaceae</i>
<i>Torilis arvensis</i> *	Japanese hedge-parsley	<i>Apiaceae</i>
<i>Toxicodendron diversilobum</i>	western poison-oak	<i>Anacardiaceae</i>
<i>Trichostema lanatum</i>	wooly bluecurls	<i>Lamiaceae</i>
<i>Ulmus</i> sp.	elm (ornamental)	<i>Ulmaceae</i>
<i>Uropappus lindleyi</i>	silver puffs	<i>Asteraceae</i>
<i>Verbena lasiostachys</i>	vervain	<i>Verbenaceae</i>
<i>Veronica peregrina</i> ssp. <i>xalapensis</i>	Mexican speedwell, purslane speedwell	<i>Scrophulariaceae</i>
<i>Vicia sativa</i> ssp. <i>nigra</i> *	narrow-leaved vetch, common vetch	<i>Fabaceae</i>
<i>Vicia villosa</i> *	hairy vetch, winter vetch	<i>Fabaceae</i>
<i>Viola pedunculata</i>	johnny jump-up	<i>Violaceae</i>
<i>Vitis girdiana</i>	desert wild grape	<i>Vitaceae</i>
<i>Vulpia myuros</i> var. <i>myuros</i> *	-	<i>Poaceae</i>
<i>Xylococcus bicolor</i>	mission manzanita	<i>Ericaceae</i>
<i>Yucca</i> sp.	Yucca (ornamental)	<i>Agavaceae</i> [ <i>Liliaceae</i> ]
<i>Yucca whipplei</i>	our lord's candle	<i>Agavaceae</i> [ <i>Liliaceae</i> ]

\* non-native species

! sensitive

APPENDIX B			
WILDLIFE SPECIES OBSERVED ON THE MONTECITO RANCH PROPERTY			
Common Name	Scientific Name	Habitat Observed	# Observed
<b>INVERTEBRATES</b>			
Acmon blue	<i>Plebejus acmon</i>	CSS	23
Alfalfa butterfly	<i>Colias eurytheme</i>	CSS	18
Ant	<b>Family</b> <i>Formicidae</i>	CSS, CHAP, NNG, EUC, OW, DIS	Many
Bee	<b>Family</b> <i>Apidae</i>	CSS, EUC, NNG	Many
Behr's metalmark	<i>Apodemia mormo virgulti</i>	CSS	40
Buckeye	<i>Junonia coenia</i>	CSS	10
Bumble bee	<i>Bombus fervidus</i>	CSS, NNG	Many
Cabbage white	<i>Artogeia rapae</i>	CSS	25
California ringlet	<i>Coenonympha californica californica</i>	CSS	3
Common white	<i>Pontia protodice</i>	CSS	45
Cricket	<b>Family</b> <i>Gryllidae</i>	CSS, NNG	Several
Dragonfly	<b>Suborder</b> <i>Anisoptera</i>	CSS, NNG, EUC	15
Edward's blue	<i>Hemiargus ceraunus gyas</i>	CSS	3
Felder's orangetip	<i>Anthocharis cethura</i>	CSS	3
Fly	<b>Family</b> <i>Muscidae</i>	CSS, NNG, EUC, CHAP, OW	Many
Funereal duskywing	<i>Erynnis funeralis</i>	CSS	34
Gnats	<b>Order</b> <i>Diptera</i>	CSS	Many
Grasshopper	<b>Family</b> <i>Acrididae</i>	CSS, NNG	Many
Gray hairstreak	<i>Strymon melinus</i>	CSS	4
Harvester ant	<i>Pogonomyrmex rugosus</i>	CSS, NNG	Many
Honey bee	<i>Apis mellifera</i>	CSS	Many
June bug	<b>Family</b> <i>Scarabaeidae</i>	CSS	3
Ladybug	<b>Family</b> <i>Coccinellidae</i>	CSS, EUC	Several
Marine blue	<i>Leptotes marina</i>	CSS	10
Moths	<b>Order</b> <i>Lepidoptera</i>	CSS	Several
Mourning cloak	<i>Nymphalis antiopa</i>	CSS	2
Painted lady	<i>Vanessa cardui</i>	CSS	70
Perplexing hairstreak	<i>Callophrys perplexa</i>	CSS	30
Queen butterfly	<i>Danaus gilippus</i>	CSS	2
Red ant	<i>Formica</i> sp.	CSS, NNG, EUC	Many
Sara orangetip	<i>Anthocharis sara</i>	CSS, CHAP	57
Sonoran blue	<i>Philotes sonorensis</i>	CSS	1
Stinkbug	<b>Family</b> <i>Pentatomidae</i>	CSS, EUC	Many
Trantula hawk	<i>Hemipepsis</i> ssp.	CSS	Several
Unidentified Blue (flybys)	<b>Subfamily</b> <i>Plebejinae</i>	CSS	25
Unidentified Lady (flybys)	<i>Vanessa</i> sp.	CSS	89
Velvet ant	<b>Family</b> <i>Mutillidae</i>	CSS	Several
Virginia lady	<i>Vanessa virginiensis</i>	CSS	6
Wasp	<b>Family</b> <i>Vespidae</i>	CSS	10+
West Coast lady	<i>Vanessa annabella</i>	CSS	10
Western tiger swallowtail	<i>Papilio rutulus</i>	OW	2
<b>AMPHIBIANS</b>			
Pacific chorus frog	<i>Pseudacris regilla</i>	AG pond	Many
Western toad	<i>Bufo boreas</i>	AG pond	Many

Common Name	Scientific Name	Habitat Observed	# Observed
<b>REPTILES</b>			
California whipsnake	<i>Masticophis lateralis</i>	CSS	1
Coastal western whiptail!	<i>Cnemidophorus tigris multiscutatus</i>	CSS	1
San Diego horned lizard!	<i>Phrynosoma coronatum blainvillei</i>	CSS	2
Two-striped garter snake!	<i>Thamnophis hammondi</i>	CSS-ditch	1
Western fence lizard	<i>Sceloporus occidentalis</i>	CSS, CHAP	Many
<b>BIRDS</b>			
Acorn woodpecker	<i>Melanerpes formicivorus</i>	OW	2
American crow	<i>Corvus brachyrhynchos</i>	CHAP, OW, NNG / overhead	14
American goldfinch	<i>Carduelis tristis</i>	CSS	5
American kestrel	<i>Falco sparverius</i>		15
Anna's hummingbird	<i>Calypte anna</i>	CSS, NNG	35
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	OW	6
Bewick's wren	<i>Thryomanes bewickii</i>	CSS, CHAP, NNG, EUC	14
Black phoebe	<i>Sayornis nigricans</i>	CSS, EUCS	6
Brown-headed cowbird	<i>Molothrus ater</i>	AG, DEV	3
Bullock's oriole	<i>Icterus bullockii</i>	CSS, EUCS	12
Bushtit	<i>Psaltiriparus minimus</i>	CSS, CHAP	75+
Coastal California gnatcatcher!	<i>Poliophtila californica californica</i>	CSS	20
California quail	<i>Callipepla californica</i>	CSS, CHAP, EUC	70+
California thrasher!	<i>Toxostoma redivivum</i>	CSS, OW	35
California towhee	<i>Pipilo crissalis</i>	CSS, CHAP, NNG	150
Cassin's kingbird	<i>Tyrannus vociferans</i>	CSS, CHAP, NNG	18
Cliff swallow	<i>Petrochelidon pyrrhonota</i>	Overhead	15
Common raven	<i>Corvus corax</i>	Overhead	15
Costa's hummingbird	<i>Calypte costae</i>	CSS	5
Dark-eyed junco	<i>Junco hyemalis</i>	OW	2
European starling	<i>Sturnus vulgaris</i>	NNG, DEV	5
Greater roadrunner	<i>Geococcyx californianus</i>	CSS, NNG	5
Hooded oriole	<i>Icterus cucullatus</i>	EUC	12
House finch	<i>Carpodacus mexicanus</i>	CSS, EUCS	80
House wren	<i>Troglodytes aedon</i>	CSS	4
Hutton's vireo	<i>Vireo huttoni</i>	CSS	1
Killdeer	<i>Charadrius vociferus</i>	NNG	8
Lark sparrow	<i>Chondestes grammacus</i>	CSS	33
Lawrence's goldfinch	<i>Carduelis lawrencei</i>	CSS	2
Lazuli bunting	<i>Passerina amoena</i>	CSS, EUC	30
Lesser goldfinch	<i>Carduelis psaltria</i>	CSS, EUC	35
Loggerhead shrike!	<i>Lanius ludovicianus</i>	CSS	1
Mallard	<i>Anas platyrhynchos</i>	Vernal pool	3
Mountain bluebird	<i>Sialia currucoides</i>	NNG	7
Mourning dove	<i>Zenaida macroura</i>	CSS, OW, EUC	50
Northern flicker	<i>Colaptes auratus</i>	CSS	3
Northern mockingbird	<i>Mimus polyglottos</i>	CSS, EUC	20
Phainopepla	<i>Phainopepla nitens</i>	EUC	4
Red-shouldered hawk!	<i>Buteo lineatus</i>	Overhead	2

Common Name	Scientific Name	Habitat Observed	# Observed
Red-tailed hawk	<i>Buteo jamaicensis</i>	EUC / overhead	11
Red-winged blackbird	<i>Agelaius phoeniceus</i>	AG	2
Rock dove	<i>Columba livia</i>	DEV	5
Say's phoebe	<i>Sayornis saya</i>	CSS	2
Scrub jay	<i>Aphelocoma californica</i>	CSS, CHAP, EUC	8
Song sparrow	<i>Melospiza melodia</i>	CSS	15
Southern California rufous-crowned sparrow!	<i>Aimophila ruficeps canescens</i>	CSS	1
Spotted towhee	<i>Pipilo erythrophthalmus</i>	CSS, NNG, EUC	65
Turkey vulture!	<i>Cathartes aura meridionalis</i>	Overhead	8
Western kingbird	<i>Tyrannus verticalis</i>	CSS	18
Western meadowlark	<i>Sturnella neglecta</i>	CSS, NNG	35+
White-breasted nuthatch	<i>Sitta carolinensis</i>	OW	10+
White-crowned sparrow	<i>Zonotrichia leucophrys</i>	CSS, NNG	40
White-tailed kite	<i>Elanus leucurus majusculus</i>	OW	2
Wrentit	<i>Chamaea fasciata</i>	CSS, CHAP	20
Yellow-rumped warbler	<i>Dendroica coronata</i>	CSS, CHAP	30
<b>MAMMALS</b>			
California ground squirrel	<i>Spermophilus beecheyi nudipes</i>	CSS, NNG, AG, OW	Many
Coyote	<i>Canis latrans clepticus</i>	CSS, NNG	2 and scat
Desert cottontail rabbit	<i>Sylvilagus audubonii</i>	CSS, CHAP	10+
Domestic dog	<i>Canis domestica</i>	CSS	scat
Dulzura kangaroo rat	<i>Dipodomys simulans</i>	CSS	1
Dusky-footed woodrat	<i>Neotoma fuscipes macrotis</i>	CSS, CHAP	Nests (Several)
Horse	<i>Equus sp.</i>	CSS	Tracks, scat
Woodrat	<i>Neotoma sp.</i>	CSS, CHAP	Nests (Several)
Southern mule deer	<i>Odocoileus hemionus fuliginata</i>	CSS, CHAP	Tracks
Habitats: AG=agricultural field; CHAP=chaparral; CSS=coastal sage scrub; DIS=disturbed; EUC=Eucalyptus woodland; NNG=non-native grassland; OW=oak woodland			

! sensitive species

**APPENDIX L**

**CNDDB FORMS**



Mail to:  
California Natural Diversity Database  
Department of Fish and Game  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95814  
Fax: (916) 324-0475  
<http://www.dfg.ca.gov/whdab/natspec.pdf>

For Office Use Only  
Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Chorizanthe leptotheca

Common Name: Peninsular spineflower

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_  
Total No. Individuals several hundred Subsequent Visit? ☐ yes ☐ no  
Is this an existing NDDDB occurrence? ☐ yes ☐ no ☒ unk.  
Collection? If yes: \_\_\_\_\_ Yes, Occ. # \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@recenv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults \_\_\_\_\_ # juveniles \_\_\_\_\_ # larvae \_\_\_\_\_ # egg masses \_\_\_\_\_ # unknown \_\_\_\_\_  
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

see attached map

County: San Diego County

Quad Name: San Pasqual

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ C

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ C

Datum: ☒ NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: ☐ UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Coordinates: Easting/Longitude

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Geographic (Latitude & Longitude) ☐

Northings/Latitude

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Sparse Diegan coastal sage scrub, southfacing

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality:

☐ Excellent

☒ Good

☐ Fair

☐ Poor

Current / surrounding land use: Semi-rural to N,E,S; undeveloped to W

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

☒

Keyed (cite reference): Hickman 1996

☐

Compared with specimen housed at: \_\_\_\_\_

☐

Compared with photo / drawing in: \_\_\_\_\_

☐

By another person (name): \_\_\_\_\_

☐

Other: \_\_\_\_\_

Photographs: (check one or more)

Plant / animal

Habitat

Diagnostic feature

Slide

Print

☐

☐

☐

☐

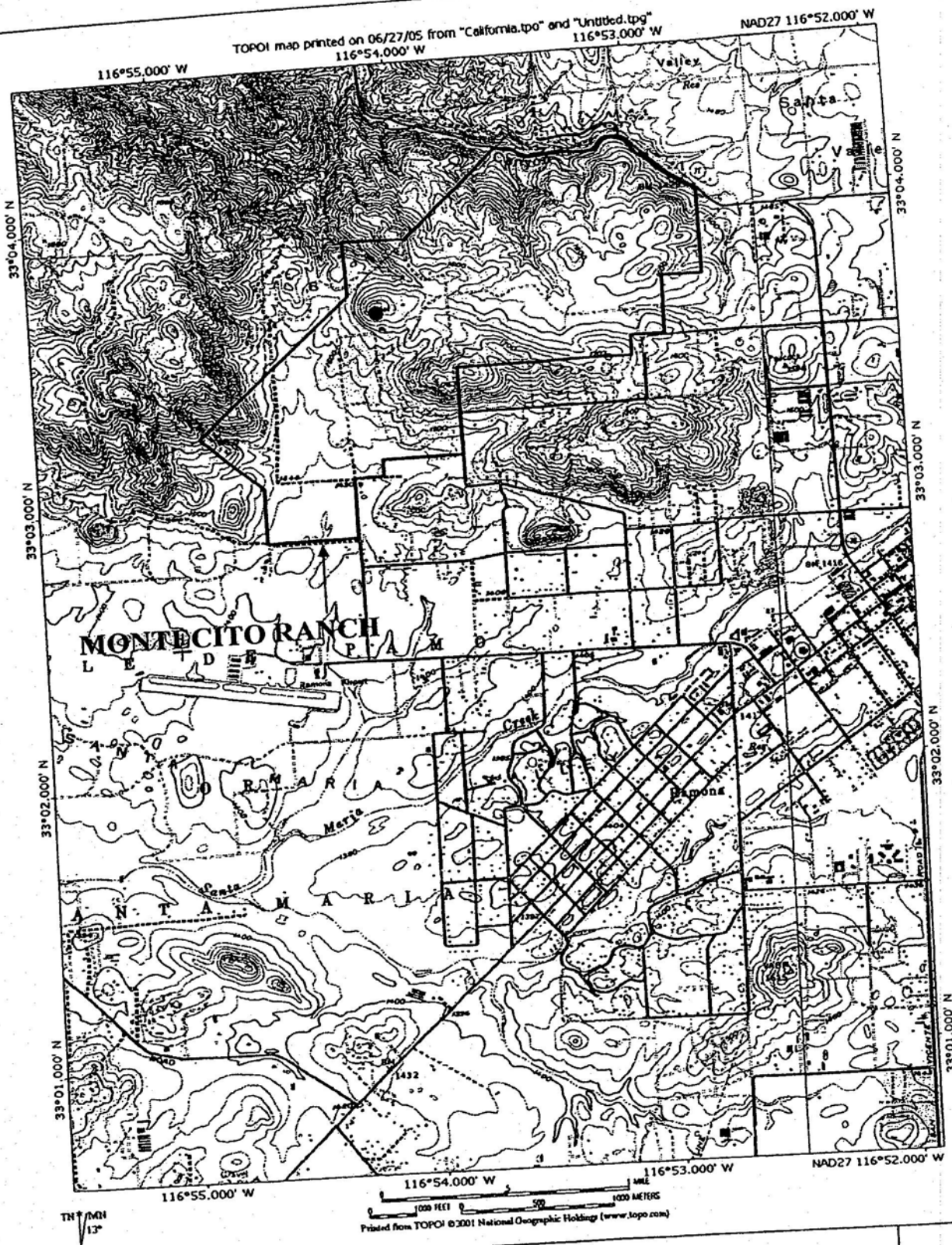
☐

☐

May we obtain duplicates at our expense?

☐ yes

☐ no



Mail to:  
California Natural Diversity Database  
Department of Fish and Game  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95814  
Fax: (916) 324-0475  
<http://www.dfg.ca.gov/whdab/natspec.pdf>

For Office Use Only

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: *Centromadia parryi* ssp. *australis*

Common Name: Southern tarplant

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 2,343 Subsequent Visit? ☐ yes ☐ no ☒ unk.  
Is this an existing NDDB occurrence? Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson  
Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: [elyssa@recenv.com](mailto:elyssa@recenv.com)

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ breeding # juveniles ☐ wintering # larvae ☐ burrow site # egg masses ☐ rookery # unknown ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)  
*see attached map*

County: San Diego County

Quad Name: San Pasqual

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ Meridian: ☐ H ☐ M ☐ S ☐

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ Meridian: ☐ H ☐ M ☐ S ☐

Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Coordinates: Easting/Longitude \_\_\_\_\_

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_

Geographic (Latitude & Longitude) ☐

Northings/Latitude \_\_\_\_\_

meters/feet

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):  
*Non-native grassland*

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: semi-rural to N, E, and S; undeveloped to W

Visible disturbances: agriculture

Threats: \_\_\_\_\_

Comments: \_\_\_\_\_

Determination: (check one or more, and fill in blanks)  
☒ Keyed (cite reference): Hickman 1996

☐ Compared with specimen housed at: \_\_\_\_\_

☐ Compared with photo / drawing in: \_\_\_\_\_

☐ By another person (name): \_\_\_\_\_

☐ Other: \_\_\_\_\_

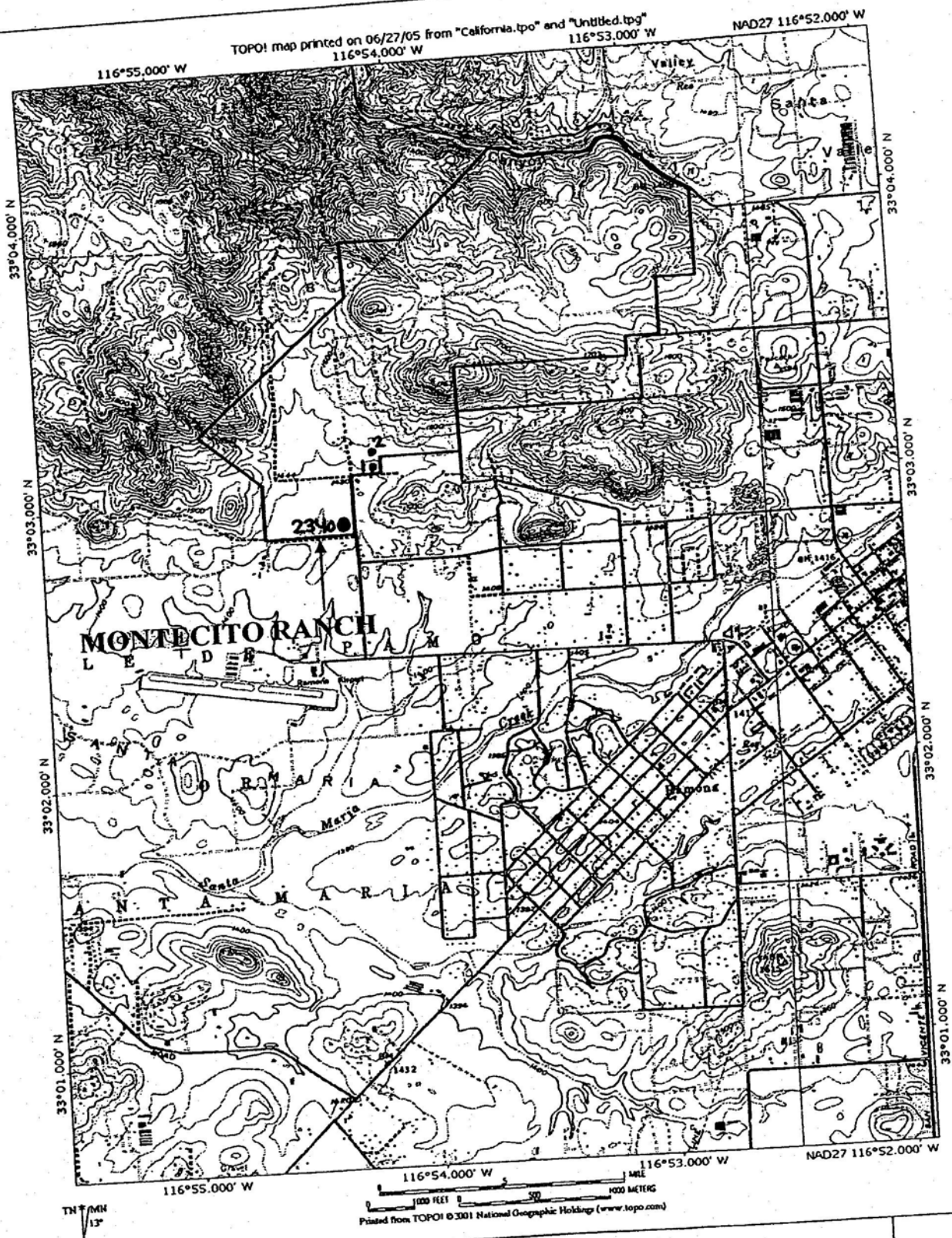
Photographs: (check one or more)

Plant / animal ☐ Slide ☐ Print

Habitat ☐

Diagnostic feature ☐

May we obtain duplicates at our expense? ☐ yes ☐ no





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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Clarkia delicata

Common Name: Delicate Clarkia

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals ~75 Subsequent Visit? ☐ yes ☐ no ☒ unk.  
Is this an existing NDDB occurrence? Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@recenv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative 100 % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ breeding ☐ wintering ☐ burrow site ☐ larvae ☐ rookery ☐ egg masses ☐ nesting ☐ unknown ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

see attached map

County: San Diego County

Quad Name: San Pasqual

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ % of \_\_\_\_\_, Meridian: H ☐ M ☐ S ☐

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ % of \_\_\_\_\_, Meridian: H ☐ M ☐ S ☐

Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Coordinates: Easting/Longitude

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Geographic (Latitude & Longitude) ☐

Northing/Latitude

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Chaparral

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: semi-rural to N, E, S; undeveloped to W

Visible disturbances: \_\_\_\_\_

Threats: development

Comments: \_\_\_\_\_

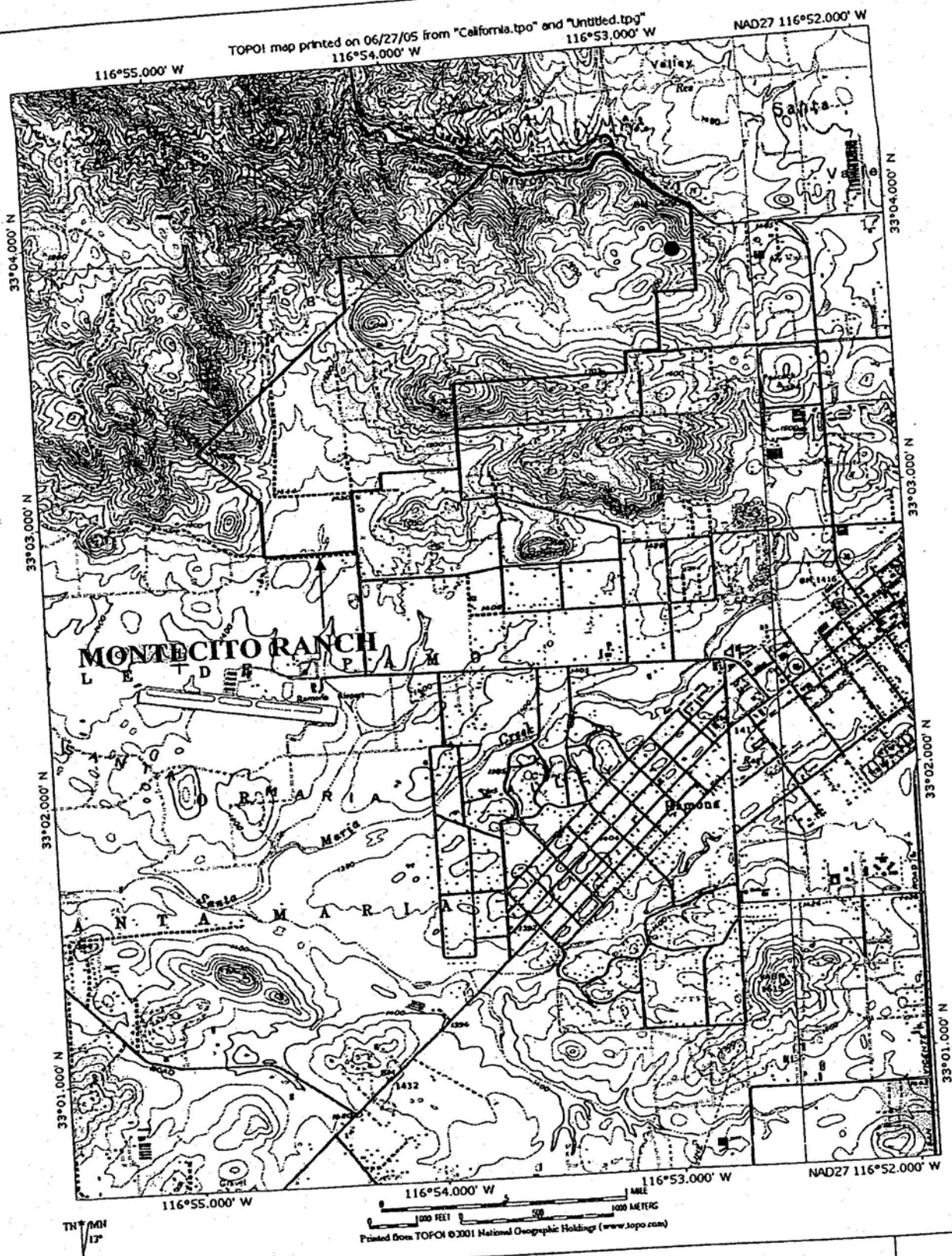
Determination: (check one or more, and fill in blanks) Hickman 1996

☒ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_  
☐ Other: \_\_\_\_\_

Photographs: (check one or more)

Plant / animal ☐ Slide ☐ Print  
Habitat ☐  
Diagnostic feature ☐

May we obtain duplicates at our expense? ☐ yes ☐ no



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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Machaeranthera juncea

Common Name: Rush-like bristleweed

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 147 Subsequent Visit? ☐ yes ☐ no  
Is this an existing NDDDB occurrence? ☐ no ☒ unk.

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@recenv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ breeding # juveniles ☐ wintering # larvae ☐ burrow site # egg masses ☐ rookery # unknown ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

see attached map

County: San Diego County

Quad Name: San Pasqual

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S

GPS Make & Model \_\_\_\_\_

Datum: ☒ NAD27 ☐ NAD83 ☐ WGS84

Horizontal Accuracy \_\_\_\_\_ meters/feet

Coordinate System: ☐ UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Geographic (Latitude & Longitude) ☐  
Northing/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Diegan coastal sage scrub, westfacing

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: semi-rural to N, E, S; undeveloped to W

Visible disturbances: \_\_\_\_\_

Threats: \_\_\_\_\_

Comments: \_\_\_\_\_

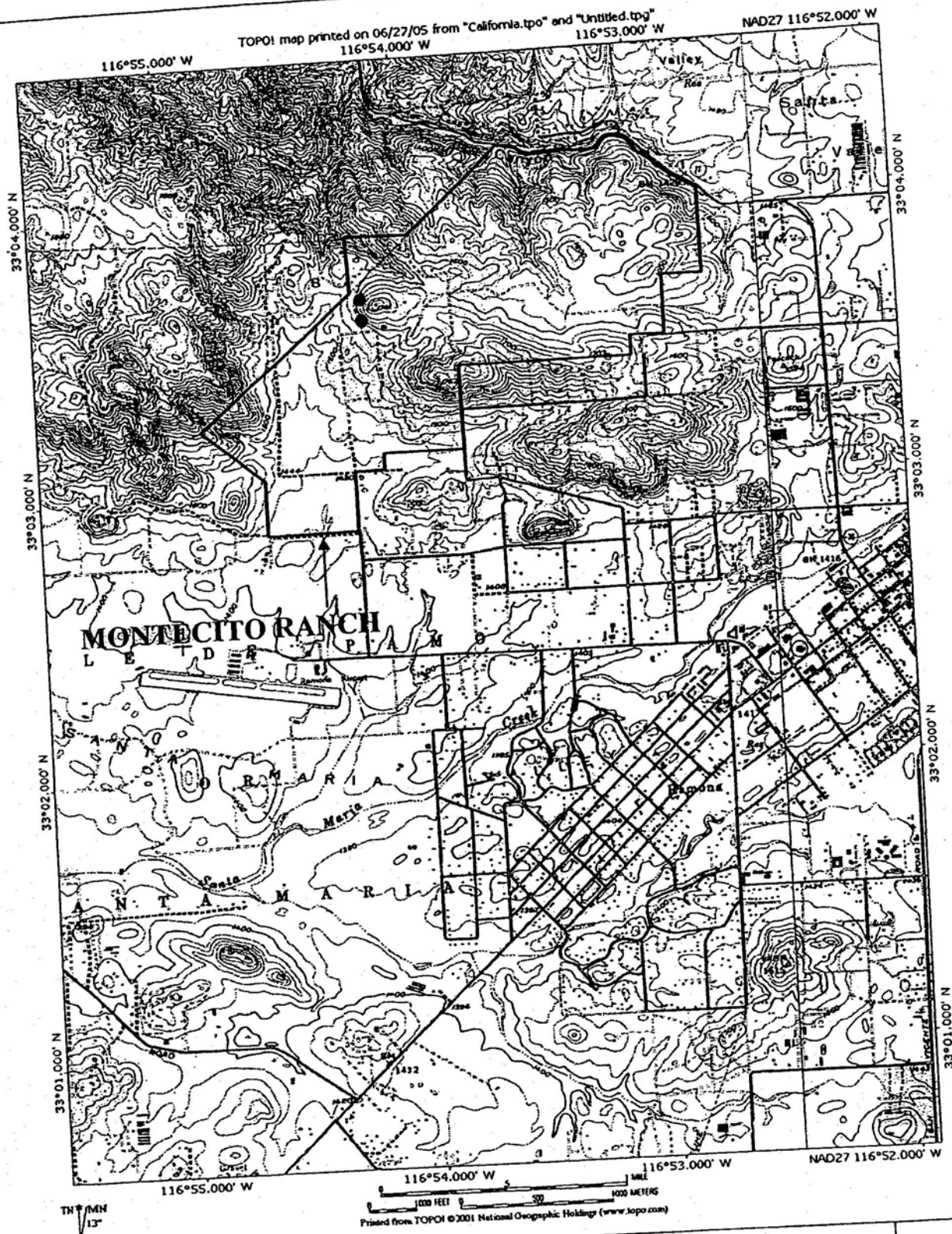
Determination: (check one or more, and fill in blanks)

☒ Keyed (cite reference): Hickman 1996  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_  
☐ Other: \_\_\_\_\_

Photographs: (check one or more)

Plant / animal ☐ Slide ☐ Print  
Habitat ☐  
Diagnostic feature ☐

May we obtain duplicates  
at our expense? ☐ yes ☐ no





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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Quercus engelmannii

Common Name: Engelmann oak

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals ~290 Subsequent Visit? ☐ yes ☐ no  
Is this an existing NDDB occurrence? ☐ no ☒ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@recenv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ breeding # juveniles ☐ wintering # larvae ☐ burrow site # egg masses ☐ rookery # unknown ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)  
see attached map

County: San Diego County

Quad Name: San Pasqual

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H ☐ M ☐ S ☐  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H ☐ M ☐ S ☐

Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Coordinates: Easting/Longitude \_\_\_\_\_

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Geographic (Latitude & Longitude) ☐

Northings/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):  
Engelmann oak woodland

Other rare species? yes-see other forms for Montecito Ranch LLC

Site Information Overall site quality:

☐ Excellent

☒ Good

☐ Fair

☐ Poor

Current / surrounding land use: semi-rural to N, E, S; undeveloped to W

Visible disturbances: drought?

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_ based on experience

Photographs: (check one or more)

Plant / animal

Habitat

Diagnostic feature

Slide

☐

☐

☐

Print

☐

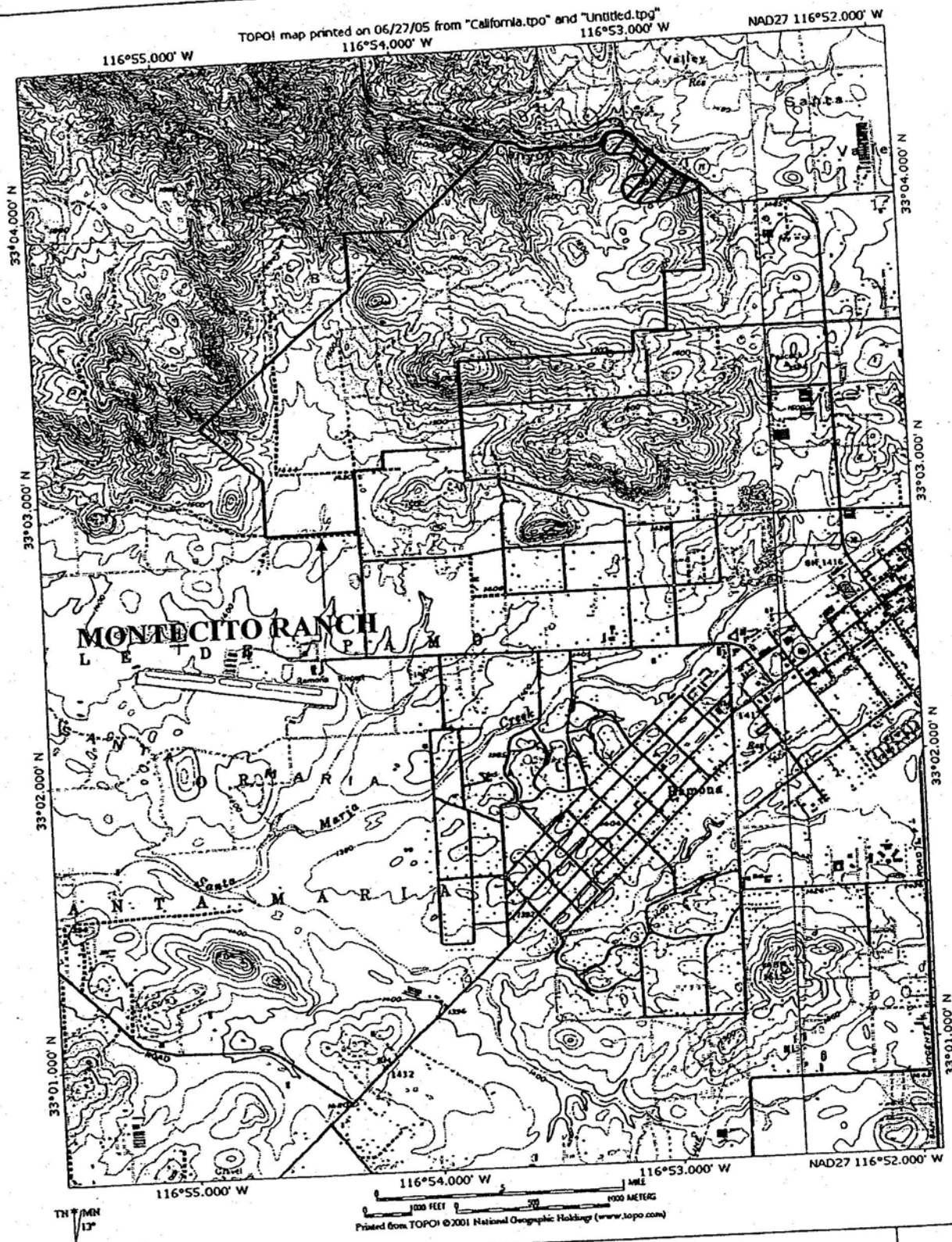
☐

☐

May we obtain duplicates  
at our expense?

☐ yes

☐ no



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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: *Cnemidophorus tigris multiscutatus*

Common Name: Coastal western whiptail

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals \_\_\_\_\_ Subsequent Visit? ☐ yes ☐ no  
Is this an existing NDDB occurrence? ☐ yes ☒ no ☐ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: [elyssa@recenv.com](mailto:elyssa@recenv.com)

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults \_\_\_\_\_ # juveniles \_\_\_\_\_ # larvae \_\_\_\_\_ # egg masses \_\_\_\_\_ # unknown \_\_\_\_\_  
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

*see attached map*

County: San Diego County

Quad Name: San Pasqual

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ % of \_\_\_\_\_ % Meridian: H ☐ M ☒ S ☐  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ % of \_\_\_\_\_ % Meridian: H ☐ M ☒ S ☐  
Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Coordinates: Easting/Longitude \_\_\_\_\_

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Geographic (Latitude & Longitude) ☐

Northing/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

*Diegan coastal sage scrub*

Other rare species? *yes - see other forms for Montecito Ranch LLC*

Site Information Overall site quality:

☐ Excellent

☒ Good

☐ Fair

☐ Poor

Current / surrounding land use: *Semi-rural to N, E, S; undeveloped to W*

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_  
*identified based on experience*

Photographs: (check one or more)

Plant / animal

Habitat

Diagnostic feature

Slide

Print

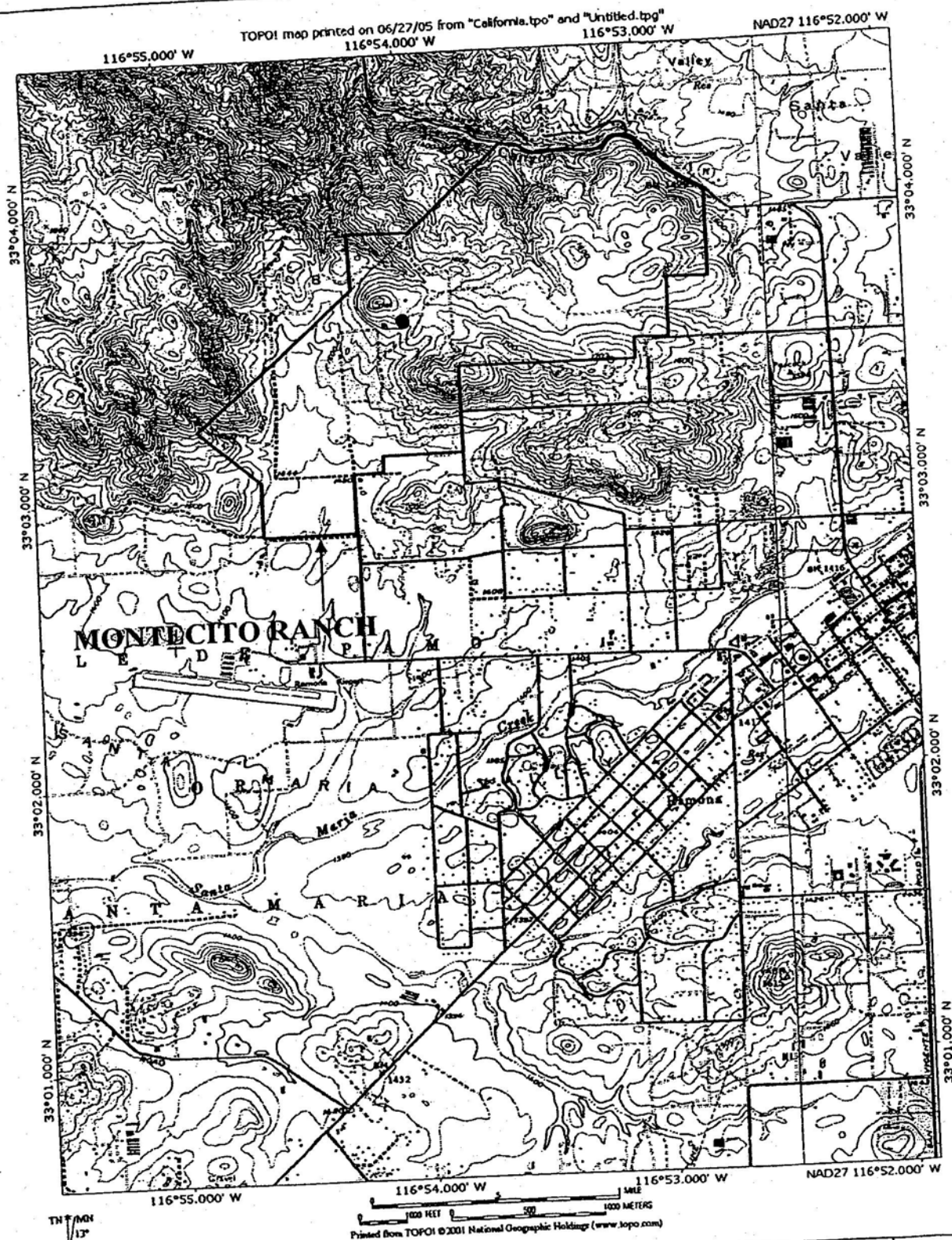
☐  
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May we obtain duplicates  
at our expense?

☐ yes

☐ no





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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: *Phrynosoma coronatum blainvillei*

Common Name: San Diego horned lizard

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 2 Subsequent Visit? ☐ yes ☐ no  
Is this an existing NODDB occurrence? ☐ no ☒ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elvssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: [elvssa@recenv.com](mailto:elvssa@recenv.com)

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ # juveniles ☐ # larvae ☐ # egg masses ☐ # unknown ☐  
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

*see attached map*

County: San Diego County

Quad Name: San Pasqual

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ W

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ W

Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR Geographic (Latitude & Longitude) ☐

Coordinates: Easting/Longitude \_\_\_\_\_

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Geographic (Latitude & Longitude) ☐

Northing/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

*Diegan coastal sage scrub*

Other rare species? *yes - see other forms for Montecito Ranch LLC*

Site Information Overall site quality:

☐ Excellent

☒ Good

☐ Fair

☐ Poor

Current / surrounding land use: *semi-rural to N.E.S; undeveloped to W*

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

☐

Keyed (cite reference): \_\_\_\_\_

☐

Compared with specimen housed at: \_\_\_\_\_

☐

Compared with photo / drawing in: \_\_\_\_\_

☐

By another person, (name): \_\_\_\_\_

☒

Other: *recognized based on experience*

Photographs: (check one or more)

Plant / animal

Habitat

Diagnostic feature

Slide

Print

☐

☐

☐

☐

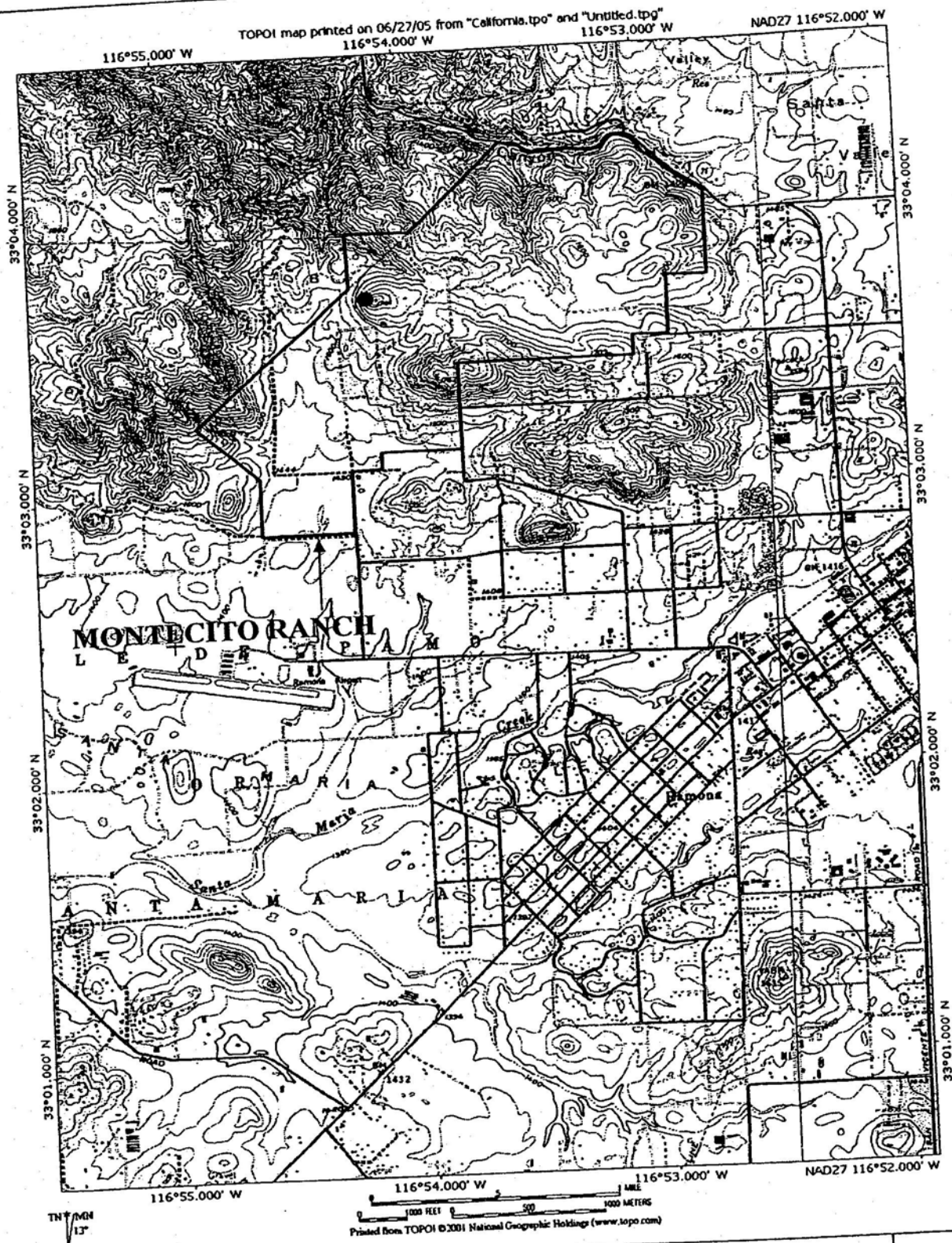
☐

☐

May we obtain duplicates  
at our expense?

☐ yes

☐ no



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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: *Aimophila ruficeps canescens*

Common Name: Southern California rufous-crowned sparrow

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals \_\_\_\_\_ Subsequent Visit? ☐ yes ☐ no  
Is this an existing NDDDB occurrence? ☐ no ☒ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: [elyssa@recenv.com](mailto:elyssa@recenv.com)

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ breeding # juveniles ☐ wintering # larvae ☐ burrow site # egg masses ☐ rookery # unknown ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)  
*see attached map*

County: San Diego County

Quad Name: San Pasqual

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_, Meridian: H ☐ M ☐ S ☐

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_, Meridian: H ☐ M ☐ S ☐

GPS Make & Model \_\_\_\_\_

Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Horizontal Accuracy \_\_\_\_\_ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Geographic (Latitude & Longitude) ☐

Coordinates: Easting/Longitude \_\_\_\_\_

Northing/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

*Diegan coastal sage scrub*

Other rare species? *yes - see other forms for Montecito Ranch LLC*

Site Information Overall site quality:

☐ Excellent

☒ Good

☐ Fair

☐ Poor

Current / surrounding land use: *semi-rural to N, E, S; undeveloped to W*

Visible disturbances:

Threats:

Comments:

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_  
☒ Other: *recognized based on experience*

Photographs: (check one or more)

Plant / animal

Habitat

Diagnostic feature

Slide ☐

☐

☐

☐

Print ☐

☐

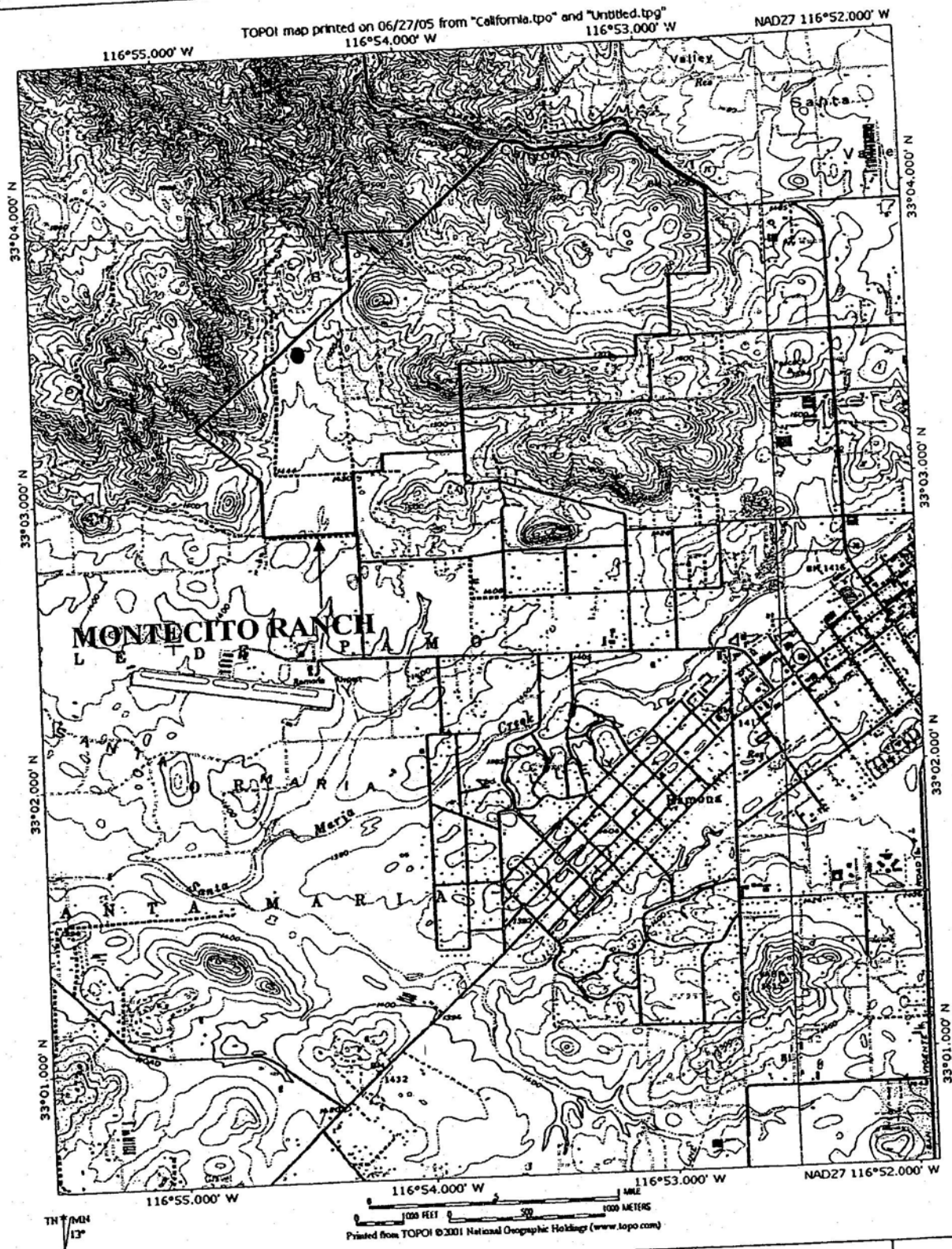
☐

☐

May we obtain duplicates  
at our expense?

☐ yes

☐ no





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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Lanius ludovicianus

Common Name: Loggerhead shrike

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 1 Subsequent Visit? ☐ yes ☐ no ☒ unk.  
Is this an existing NDDB occurrence? ☐ Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@recenv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults ☐ breeding # juveniles ☐ wintering # larvae ☐ burrow site # egg masses ☐ rookery # unknown ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)  
see attached map

County: San Diego County

Quad Name: San Pasqual

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ W

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Datum: ☒ NAD27 ☐ NAD83 ☐ WGS84

Geographic (Latitude & Longitude) ☐

Coordinate System: ☐ UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Northing/Latitude \_\_\_\_\_

Coordinates: Easting/Longitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):  
Diegan coastal sage scrub

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: semi-rural to N, E, S; undeveloped to W

Visible disturbances: \_\_\_\_\_

Threats: development

Comments: \_\_\_\_\_

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_  
☒ Other: recognized based on experience

Photographs: (check one or more)

Plant / animal ☐ Slide ☐ Print  
Habitat ☐  
Diagnostic feature ☐

May we obtain duplicates at our expense? ☐ yes ☐ no



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California Natural Diversity Database  
Department of Fish and Game  
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Sacramento, CA 95814  
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EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: *Polioptila californica californica*

Common Name: California gnatcatcher

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 20 Subsequent Visit? ☐ yes ☐ no ☒ unk.  
Is this an existing NDDDB occurrence? Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: [elyssa@rcccnv.com](mailto:elyssa@rcccnv.com)

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

12 # adults 8 # juveniles \_\_\_\_\_ # larvae \_\_\_\_\_ # egg masses \_\_\_\_\_ # unknown \_\_\_\_\_  
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description (please attach map **AND/OR** fill out your choice of coordinates, below)

see attached map

County: San Diego County

Quad Name: San Pasqual

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H ☐ M ☐ S ☐

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H ☐ M ☐ S ☐

Datum: NAD27 ☐ NAD83 ☐ WGS84 ☐

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Coordinates: Easting/Longitude

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Geographic (Latitude & Longitude) ☐

Northing/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Coastal sage scrub

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: semi-rural to N, E, and S; undeveloped to W

Visible disturbances:

Threats: development

Comments:

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person, (name): \_\_\_\_\_  
☒ Other: recognized based on experience

Photographs: (check one or more)

Plant / animal  
Habitat  
Diagnostic feature

Slide ☐  
Print ☐

May we obtain duplicates  
at our expense?

☐ yes ☐ no





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California Natural Diversity Database  
Department of Fish and Game  
1807 13<sup>th</sup> Street, Suite 202  
Sacramento, CA 95814  
Fax: (916) 324-0475  
<http://www.dfg.ca.gov/whdab/natspec.pdf>

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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Thamnophis hammondi

Common Name: Two-striped garter snake

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_  
Total No. Individuals 1 Subsequent Visit? ☐ yes ☐ no  
Is this an existing NODB occurrence? ☐ no ☒ unk.  
Yes, Occ. # \_\_\_\_\_  
Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@reccnv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults \_\_\_\_\_ # juveniles \_\_\_\_\_ # larvae \_\_\_\_\_ # egg masses \_\_\_\_\_ # unknown \_\_\_\_\_  
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

see attached map

County: San Diego County

Landowner / Mgr.: Montecito Ranch LLC

Quad Name: San Pasqual

Elevation: 1420-1750 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S

GPS Make & Model \_\_\_\_\_

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

Horizontal Accuracy \_\_\_\_\_ meters/feet

Coordinate System: ☐ UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Geographic (Latitude & Longitude) ☐

Coordinates: Easting/Longitude \_\_\_\_\_

Northing/Latitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Diegan coastal sage scrub

Other rare species? yes - see other maps for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: semi-rural to N,E,S; and undeveloped to W

Visible disturbances: \_\_\_\_\_

Threats: \_\_\_\_\_

Comments: \_\_\_\_\_

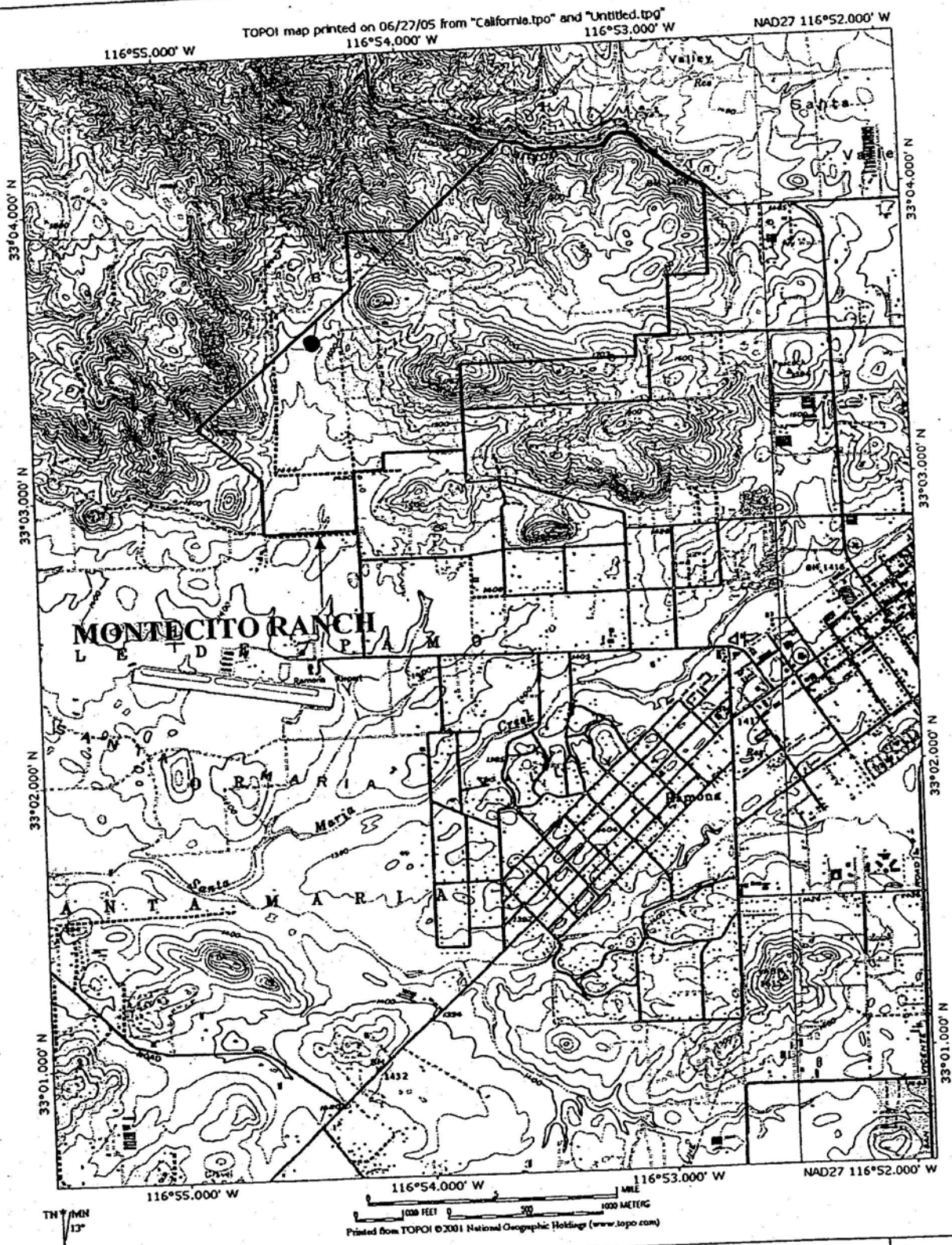
Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☒ Compared with photo / drawing in: Stebbins  
☐ By another person (name): \_\_\_\_\_  
☐ Other: \_\_\_\_\_

Photographs: (check one or more)

Plant / animal ☐ Slide ☐ Print  
Habitat ☐  
Diagnostic feature ☐

May we obtain duplicates  
at our expense? ☐ yes ☐ no



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Sacramento, CA 95814  
Fax: (916) 324-0475  
<http://www.dfg.ca.gov/whdab/natspec.pdf>

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Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work: \_\_\_\_\_ - 2001 - 2005

## California Native Species Field Survey Form

Scientific Name: Toxostoma redivivum

Common Name: California thrasher

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 35 Subsequent Visit? ☐ yes ☐ no  
Is this an existing NDDDB occurrence? ☐ no ☒ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_ Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: Elyssa Robertson

Address: 2332 Second Avenue  
San Diego, CA 92101

E-mail Address: elyssa@recenv.com

Phone: (619) 232-9200

### Plant Information

Phenology: \_\_\_\_\_ % vegetative \_\_\_\_\_ % flowering \_\_\_\_\_ % fruiting

### Animal Information

# adults \_\_\_\_\_ # juveniles \_\_\_\_\_ # larvae \_\_\_\_\_ # egg masses \_\_\_\_\_ # unknown \_\_\_\_\_  
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

see attached map

County: San Diego County

Quad Name: San Pasqual

Landowner / Mgr.: Montecito Ranch LLC

Elevation: 1420-1750 ft

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ Q  
T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S ☐ Q

Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

GPS Make & Model \_\_\_\_\_

Horizontal Accuracy \_\_\_\_\_ meters/feet

Datum: ☒ NAD27 ☐ NAD83 ☐ WGS84

Geographic (Latitude & Longitude) ☐

Coordinate System: ☐ UTM Zone 10 ☐ UTM Zone 11 ☐ OR

Northings/Latitude \_\_\_\_\_

Coordinates: Easting/Longitude \_\_\_\_\_

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope):

Variety of habitats including coastal sage scrub and riparian scrub.

Other rare species? yes - see other forms for Montecito Ranch LLC

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: Semi-rural to N.E.S.; undeveloped to W

Visible disturbances: \_\_\_\_\_

Threats: development

Comments: \_\_\_\_\_

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☐ Compared with photo / drawing in: \_\_\_\_\_  
☐ By another person (name): \_\_\_\_\_  
☒ Other: recognized based on experience

Photographs: (check one or more)

Plant / animal ☐ ☐  
Habitat ☐ ☐  
Diagnostic feature ☐ ☐

May we obtain duplicates  
at our expense? ☐ yes ☐ no

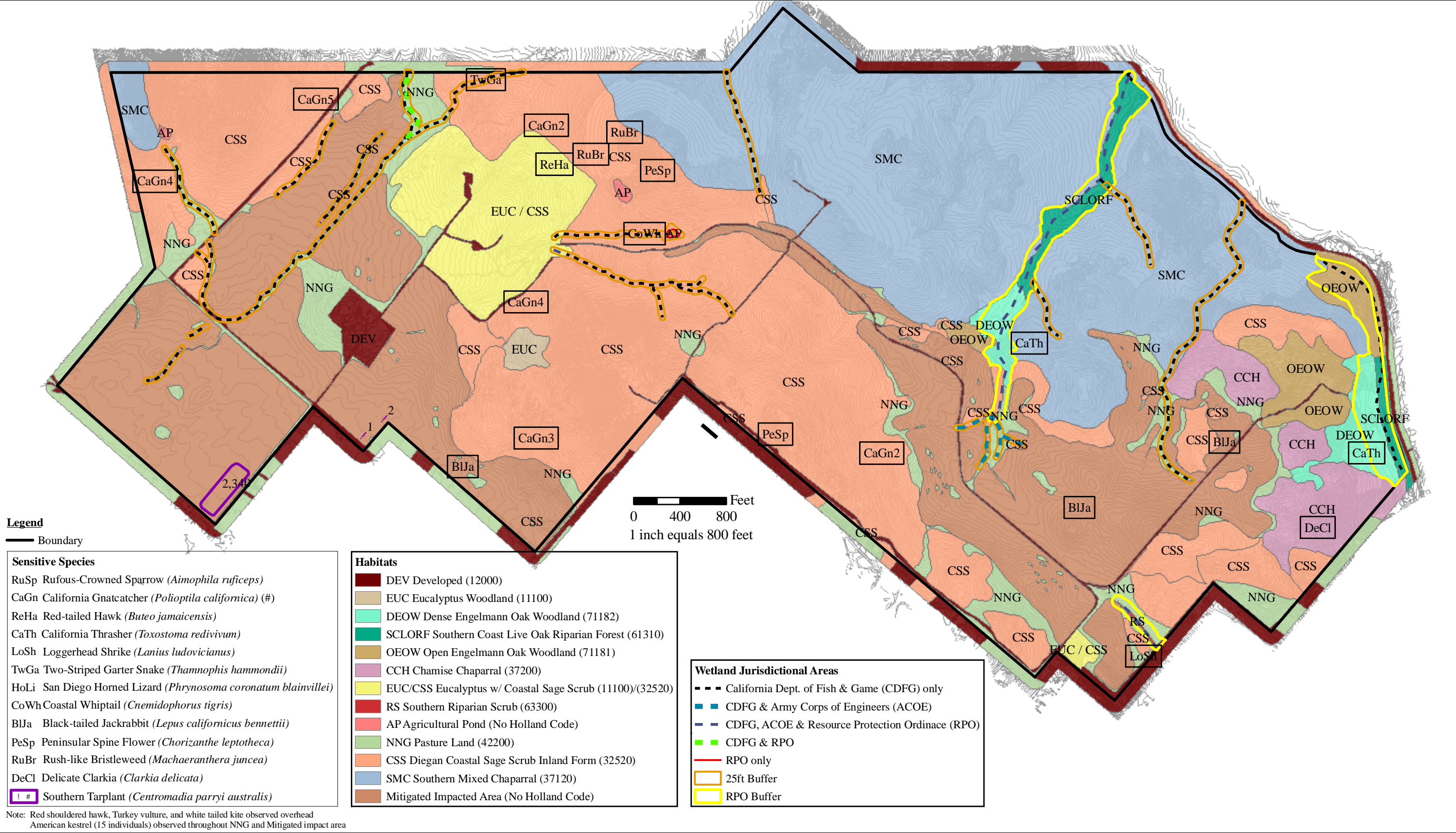
Slide ☐ ☐  
Print ☐ ☐

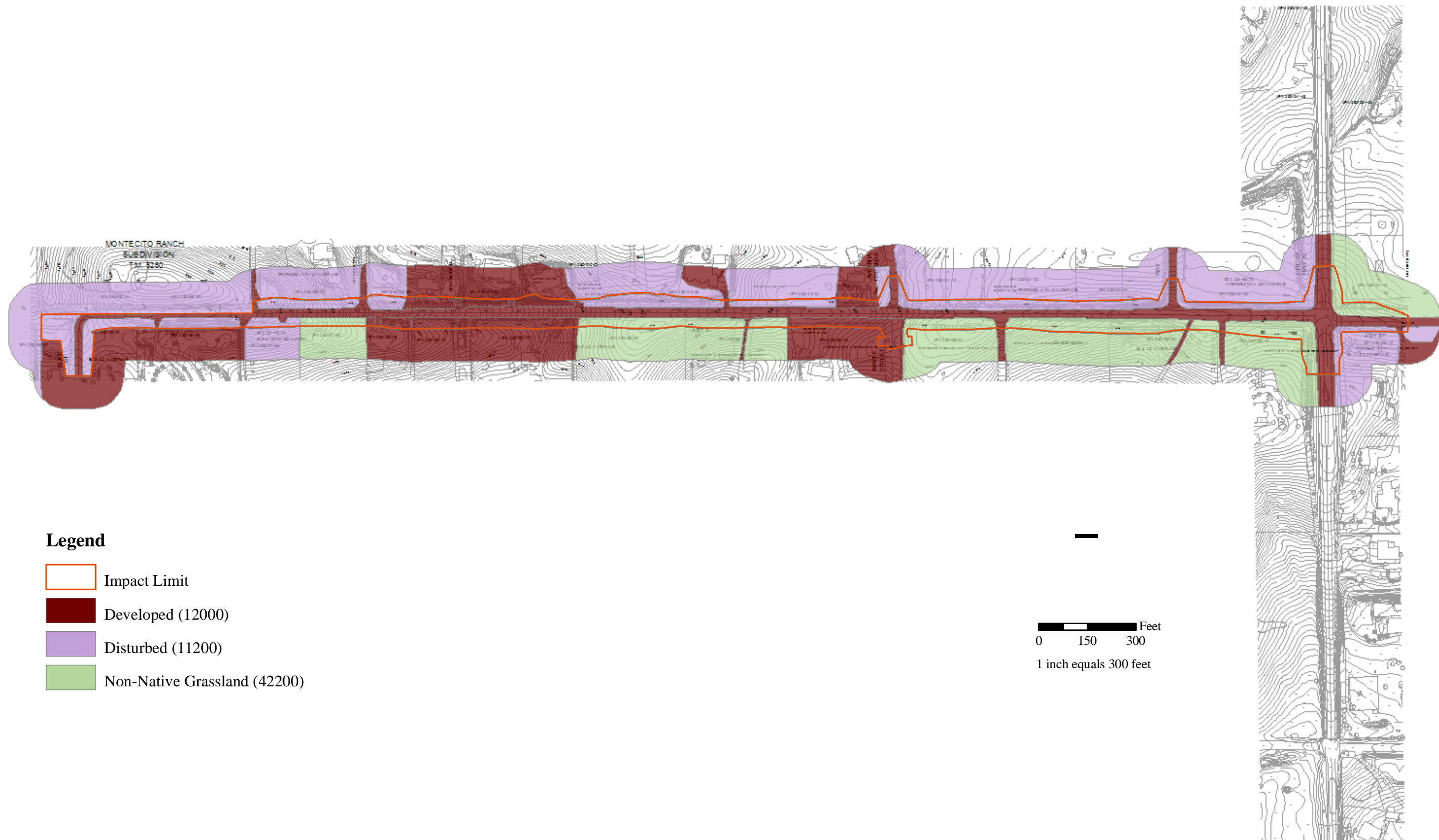




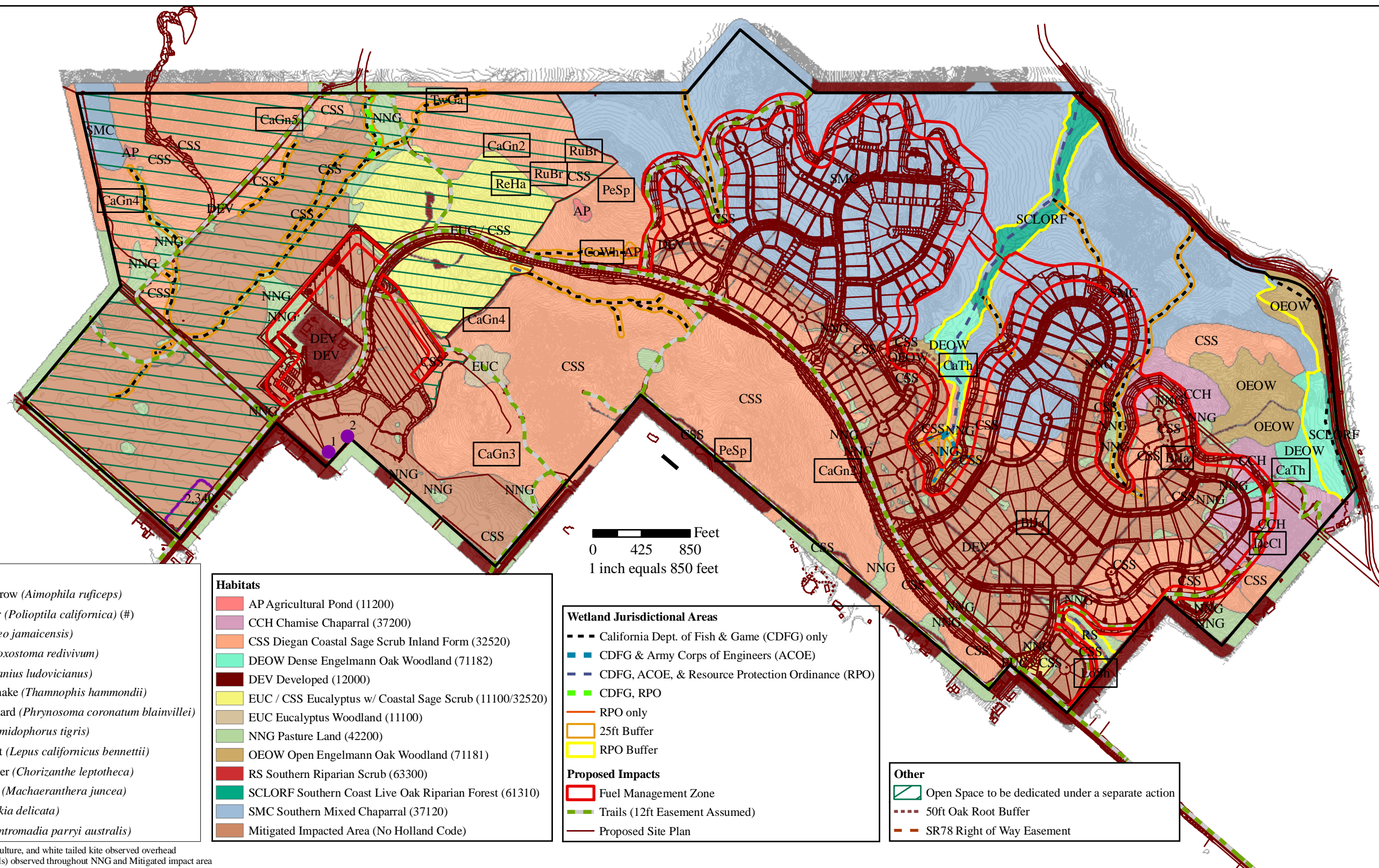
## **APPENDIX M**

### **LARGE SCALE COPIES OF FIGURES 3, 5, 8 AND 15**





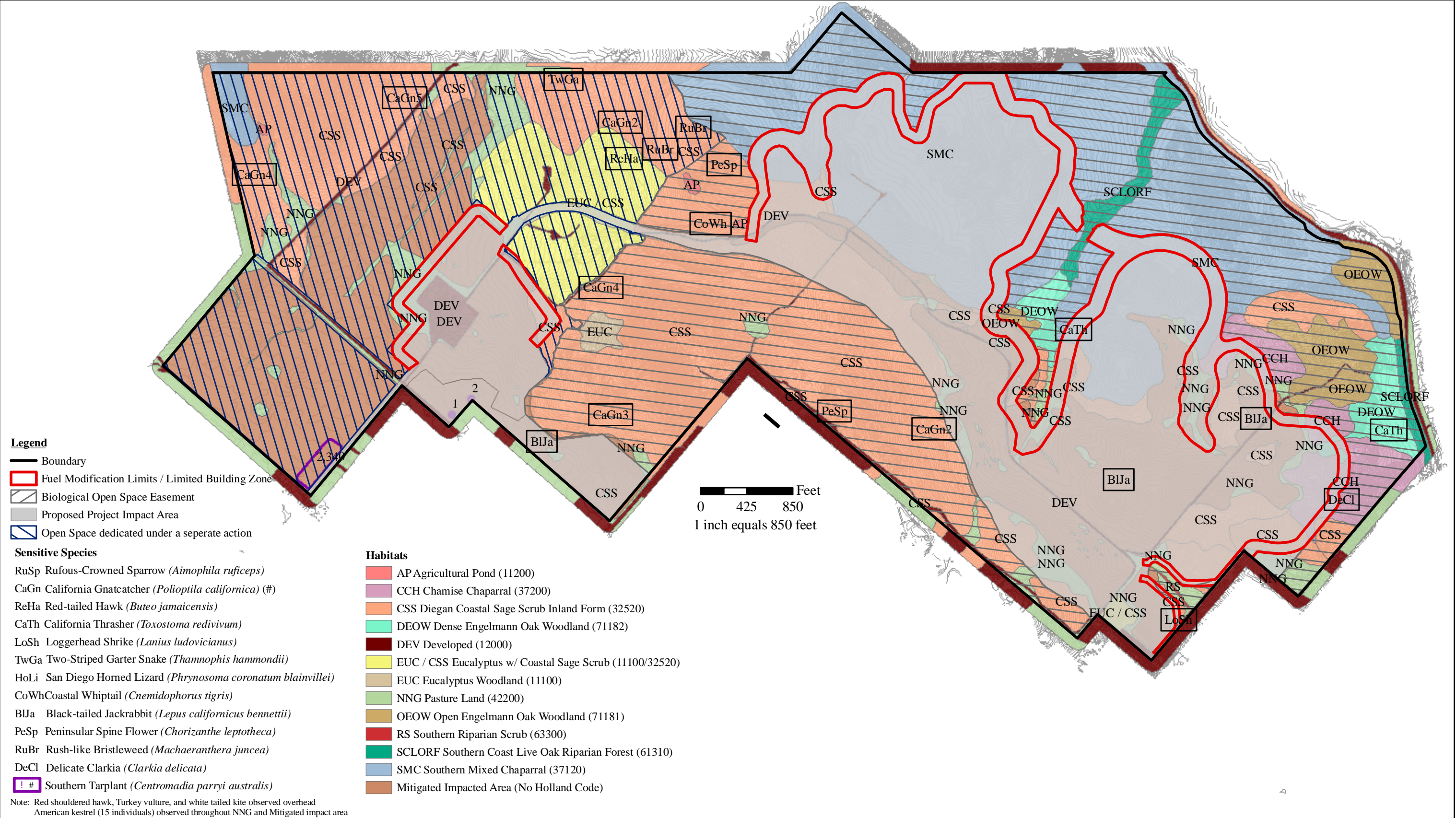




**IMPACT MAP**  
 Montecito Ranch

**Figure**  
 8





Consultants, Inc.

## OPEN SPACE MAP Montecito Ranch

Figure  
15

**APPENDIX N**

**CONCEPTUAL REVEGETATION PLAN**

**MONTECITO RANCH  
CONCEPTUAL REVEGETATION PLAN  
TM 5250**

*Prepared for:*

MONTECITO RANCH LLC  
402 West Broadway, Suite 2175  
San Diego, CA 92101-3542

*Prepared by:*



**Consultants, Inc.**

2442 Second Avenue  
San Diego, California 92101  
(619) 232-9200

February 2008

A handwritten signature in black ink, appearing to read "Elyssa Robertson", is written over a thin horizontal line.

**Elyssa Robertson  
County Certified Biologist**

## **EXECUTIVE SUMMARY**

The proposed wetland creation project is located on the 935-acre Montecito Ranch property in the unincorporated community of Ramona in the county of San Diego, approximately 20 miles northeast of the City of San Diego. The project site is located approximately one mile northwest of the Ramona Town Center. Pine Street, which also serves as State Route 78 borders the northern project boundary while Montecito Way, stems for the southern project boundary. This site is located on the San Pasqual USGS 7.5' quadrangle map, Range 1 East and Township 13 South.

The specific wetland impact associated with this TM is due to improvements to an offsite access road. The project includes several offsite roadway improvements and offsite facilities including the construction of an offsite water tank. The project proposes to widen Ash Street, construct Montecito Ranch Road through the Project site from Ash Street at the eastern SPA boundary to Montecito Way at the southern boundary, construct on-site residential streets connecting to Montecito Ranch Road, widen the existing segment of Montecito Way, and widen Montecito Road from Montecito Way to Main Street which will include improvements to the existing bridge over Santa Maria Creek. These improvements would impact 0.24 acres of wetland. Impacts for roadway improvements will be mitigated with habitat creation at a 1:1 ratio as well as habitat enhancement at a 2:1 ratio.

The conceptual wetland creation and enhancement areas will be implemented onsite for roadway improvements. The revegetation is located in the southwestern section of Montecito Ranch within a designated open space area. This area is located between the existing ranch house and an un-named dirt road to the west. The proposed wetland creation will occur as an additional area to an already proposed wetland creation planned for the site.



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## ATTACHMENTS

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## **1.0 DESCRIPTION OF THE IMPACT SITE**

### **1.1 Responsible Parties**

This Revegetation Report is prepared for the Montecito Ranch Project (Tentative Map (TM) 5250). Current property owners are responsible for the implementation of this plan. The current responsible party is Montecito Ranch LLC.

### **1.2 Location of the Development Project**

The proposed wetland creation project is located on the 935.2-acre Montecito Ranch property in the unincorporated community of Ramona in the County of San Diego, approximately 20 miles northeast of the City of San Diego. The project site is located approximately one mile northwest of the Ramona Town Center. Pine Street, which also serves as State Route (SR) 78, borders the northern project boundary, while Montecito Way stems from the southern project boundary. Figures 1 and 2 depict the regional and site vicinity locations, respectively.

The specific wetland impact associated with this TM is due improvements to of an offsite access road. The project includes several offsite roadway improvements and offsite facilities including the construction of an offsite water tank. The project proposes to widen Ash Street, construct Montecito Ranch Road through the Project site from Ash Street at the eastern SPA boundary to Montecito Way at the southern boundary, construct on-site residential streets connecting to Montecito Ranch Road, widen Montecito Way, and widen Montecito Road from Montecito Way to Main Street which will include improvements to the existing bridge over Santa Maria Creek. These improvements would impact 0.24 acres of wetland.

### **1.3 Summary of Project and Proposed Mitigation**

The following information describes the conditions on Montecito Ranch, where the overall development and mitigation will take place, as well as the offsite impact locations for which this report is prepared.

The proposed 935.2-acre Montecito Ranch project (proposed project) is located in the unincorporated community of Ramona in the County of San Diego. Historically, the site has been used until 2002 for cattle grazing, and oat hay farming. The project site is undeveloped except for a small ranch house that is to be preserved as well as several agricultural related ponds and numerous dirt roads.

The project includes the development of 397.04 acres of the overall 935.2 acres of the project site. The project proposes to improve offsite facilities including the

construction of an offsite water tank. The project also includes several offsite roadway improvements. The project proposes to widen Ash Street, construct Montecito Ranch Road through the Project site from Ash Street at the eastern SPA boundary to Montecito Way at the southern boundary, construct on-site residential streets connecting to Montecito Ranch Road, widen Montecito Way, and widen Montecito Road from Montecito Way to Main Street which will include improvements to the existing bridge over Santa Maria Creek. This option would impact an additional 26.63 total acres (including 0.24 acres of wetland).

The Montecito Ranch SPA is generally characterized by a broad valley in the central portion of the site with gently sloping terrain to the north. In addition, three distinct knolls are located onsite; one in the central northernmost portion of the site; one adjacent to the northwest project boundary; and the other adjacent to the central southern project boundary. Elevations vary onsite from a high of approximately 1750 ft above mean sea level atop the knoll along the central southern property boundary to approximately 1,420 feet above mean sea level in the southwestern portion of the project site.

The project site and the offsite improvement areas support several sensitive plant communities, including Diegan coastal sage scrub, oak woodlands (open Engelmann oak woodland, dense Engelmann oak woodland, and Southern Coast Live oak woodland), wetlands (riparian scrub, disturbed wetlands), non-native grasslands and chaparral (chamise chaparral and southern mixed chaparral). In addition, there are rock outcrops onsite. Non-native grasslands occur on the flatter portions of the property where cattle grazing or historical farming have altered the natural vegetation.

Sensitive plant species that occur on the project site or within the right of way for the roadway improvements include: peninsular spineflower, delicate clarkia, rush-like bristleweed, Engelmann oak and southern tarplant. Sensitive wildlife species observed onsite include a variety of raptors, California gnatcatcher, loggerhead shrike, Southern California rufous crowned sparrow, black-tailed jackrabbit, coastal western whiptail, San Diego horned lizard, San Diego desert woodrat and two striped garter snakes.

This revegetation plan is being prepared in response to impacts associated with offsite roadway expansions. No RPO wetlands are proposed to be impacted on the Montecito Ranch property. Proposed roadway improvements would impact 0.24 acres of Riparian woodland at one location along Santa Maria Creek caused by widening the existing bridge on Montecito Road. This would require a total wetland mitigation of 0.24 acre including habitat creation at a 1:1 ratio and habitat enhancement at a 2:1 ratio. Table 1 summarizes the habitat impacts and mitigation requirements for the proposed roadway improvements.

**Table 1. Summary of Wetland Impacts and Mitigation for Roadway Improvements.**

<b>Habitats impacted</b>	<b>Total Impacted Acreage</b>	<b>Habitat Creation Ratio and Acreage</b>	<b>Habitat Enhancement Ratio and Acreage</b>	<b>Total Mitigation Ratio and Acreage</b>
Riparian woodland- 0.24	0.24 ac	1:1 (0.24 ac)	2:1 (0.48 ac)	3:1 (0.72 ac)

## **2.0 GOALS OF THE REVEGETATION PLAN**

### **2.1 Responsibilities**

#### **2.1.1 Responsibility of the Project Owner**

The owner of the site, Montecito Ranch LLC, will be responsible for the success of this project. The owner's responsibilities include contracting a Project Biologist, an Installation Contractor, a Maintenance contractor, and providing the finances to carry out the project.

#### **2.1.2 Responsibility of the County of San Diego**

The County of San Diego is responsible for ensuring that the final Revegetation Plan is implemented per plan, that the annual maintenance, monitoring and reporting occur, and that the final success criteria are achieved. The County of San Diego has the ability to determine if success thresholds have been met and that the habitat created or restored are functioning in the manner that is the goal of the project.

#### **2.1.3 Responsibility and Qualifications of Mitigation Project Designer**

The Mitigation Project designer is responsible for taking this conceptual plan and preparing a final revegetation plan including landscape drawings in accordance with County of San Diego requirements. The plan and the drawings shall be in enough detail to be implemented by a contractor. The designer should have knowledge of the vegetation associations proposed for the mitigation site, at least two years of study or practical experience in native habitat design and function, and at least two years of field experience in identifying and sampling native vegetation of the San Diego region. If the designer is not a landscape architect, the designer will over see a landscape architect in the completion of the final drawings.

#### **2.1.4 Responsibility and Qualification of Installation Contractor**

The installation contractor will have the responsibility of implementing the landscape drawings contained within the final revegetation plan, and will be responsible for the maintenance of the mitigation area until final notification is received from the Revegetation Monitor certifying proper completion of all required installation contract maintenance tasks, including but not limited to dead

plant removal, erosion control, retrofitting plants with browse barriers (if needed), weeding, irrigation regime (if needed) and irrigation system maintenance as needed.

The Installation contractor shall be responsible for the replacement of all plant materials, considered dead or diseased by the Revegetation Monitor, by the specific replacement dates defined in the Final Revegetation Plan.

#### **2.1.5 Responsibility and Qualification of Revegetation Monitor**

A Revegetation Monitor shall direct the project's horticultural monitoring program. The Revegetation Monitor should have training and/or local experience in growing native plant species used in this project; minimum of two years of practical horticultural experience with native plant communities and at least two years of local experience in identifying and sampling native vegetation. The Revegetation Monitor will be responsible for monitoring the installation of the revegetation site in accordance with the specifications. The Revegetation Monitor will be responsible for ensuring that the plans are implemented correctly, that the contractor maintains the site to the standards of the final revegetation plan, conduct the specified number of horticultural monitoring visits, collect data annually to determine success standards and provide communication between the contractor, the property owner and the County of San Diego.

#### **2.1.6 Responsibility and Qualification of Maintenance Contractor**

After the installation is deemed complete, the Applicant shall hire a Maintenance Contractor for the 5-year monitoring period. The Maintenance Contractor will be hired on an annual basis with renewal based on the recommendations of the project biologist and the applicant. The maintenance contractor may change on a yearly basis, at the discretion of the applicant and project biologist, if proper maintenance is not performed. The Maintenance Contractor will be responsible for the maintenance program requirements once the installation Contractor's work has been certified as complete. Upon termination of each maintenance contract, the maintenance Contractor will be responsible for completion of all requests for work specified by the project biologist before receiving final payment.

### **2.2 Habitats to be Restored, Enhanced, and/or Preserved**

The proposed wetland mitigation will be the creation and enhancement of willow riparian woodland and riparian scrub. These habitats, once established will meet or exceed the functions of the areas impacted.

## **2.3 Functions and Values**

The focus of this revegetation plan is to construct a successful native wetland area within a protected open space area that will thrive on its own and provide suitable foraging and breeding habitat for local wildlife after the five-year monitoring period. The design will consist of creating approximately 0.24 acre of willow riparian woodland and riparian scrub habitat along a created drainage channel that will occur within the central portion of the open space area. The goal is to add to the general diversity of habitat and to provide foraging, nesting, and roosting opportunities for wildlife.

## **2.4 Time Lapse**

It is anticipated that the mitigation will be installed concurrently with the habitat impact. If the mitigation site is not installed concurrently with the habitat impact, then it must be installed within one year of the impact occurring. The one-year time frame is provided in case construction of the road crossing does not coincide with the appropriate time of year to conduct wetland creation.

## **2.5 Cost**

The total cost for implementation of this mitigation plan will be determined as part of the Final Plan. The cost must include the following:

- 1) Include all compensatory mitigation site preparation, planting, maintenance, and monitoring and,
- 2) Provide a complete itemized cost estimate for each installation, each maintenance year, and each monitoring year for the mitigation project. Include a 3% (compounding) annual inflation factor per year for the compensatory mitigation costs to be applied to the total project cost.

## **3.0 DESCRIPTION OF THE PROPOSED COMPENSATORY MITIGATION SITE**

### **3.1 Site Selection**

The creation site is suitable because it features two of the three diagnostic wetland criteria needed for a successful riparian ecosystem: wetland hydrology and facultative plant species. There are two natural drainages within the open space area that display many local hydrologic features such as ephemeral water movement and scouring, high water table, and erosion and sedimentation. With natural hydrologic factors present, this area would have adequate hydrology to support a riparian system.

The onsite soil, Bonsall Fallbrook sandy loams 2-5% slopes, has been disturbed by disking, but is still of the proper soil type to support facultative species (USDA 1973). This soil type is described as having medium fertility and allows root depths up to 60 inches (5-feet). Bonsall Fallbrook sandy loams soil is known for

its sandy clay sub-soil, which maintains a slow to moderate permeability and a water holding capacity of up to 8 inches with slow to moderate run-off.

In comparison, the Santa Maria creek reference site has soil types known as Tujunga Series and Visalia Series. Soils at both sites share similar characteristics such as medium to high fertility, root depths up to 60 inches, moderate to rapid permeability, and water holding capacity of up to 9 inches.

Although the Bonsall Fallbrook sandy loam soil is not listed as hydric, it does have the adequate capacity to support facultative species such as the ones that make up riparian scrub and willow riparian woodland. Based on the succession of facultative species (after the disking activities) and natural hydrologic features present onsite, it is anticipated that disturbance to the soil profile will not permanently inhibit growth of an introduced riparian system.

### **3.2 Location and Size of Compensatory Mitigation Site**

The proposed wetland creation project is located on the 935-acre Montecito Ranch property in the unincorporated community of Ramona in the county of San Diego, approximately 20 miles northeast of the City of San Diego (Figure 1). Montecito Ranch is located approximately one mile northwest of the Ramona Town Center. The mitigation site will be located within the designated open space west of the existing ranch house. This site is located on the San Pasqual USGS 7.5' quadrangle map, Range 1 East and Township 13 South (Figure 2).

The impacts caused by roadway improvements will be mitigated onsite. The wetland creation area (1:1 ratio) is specifically located in the southwestern section of the Montecito Ranch site within a designated open space area. This area located between the existing ranch house and an un-named dirt road to the west (Figure 3). The proposed wetland creation will occur as an additional area to an already proposed wetland creation planned for this site. The wetland enhancement mitigation area (2:1 ratio) will be located within one of the three drainages on Montecito Ranch.

The design will consist of creating approximately 0.24 acre of willow riparian woodland and riparian scrub habitat along a created drainage channel that will occur within the central portion of the open space area. The goal is to add to the general diversity of habitat and to provide foraging, nesting, and roosting opportunities for wildlife.

### **3.3 Functions and Values**

Throughout the open space area there is a diverse succession of native and non-native facultative species adjacent to the two small drainage swales. For example, there is a single mature Arroyo willow (*Salix lasiolepis*) growing approximately 20 feet from the bank of the easterly drainage with hydrophytic



understory species including western ragweed (*Ambrosia psilostachya*), mariposa rush (*Juncus bufonius*), common tarweed (*Hemizonia fasciculata*), grass poly (*Lythrum hyssopifolium*), annual rabbit-foot (*Polypogon monspeliensis*) and barley (*Hordeum* sp). The presence of abundant native and non-native hydrophytic species in the open space area in spring of 2005 also indicates that valuable soil biotic matter still remains onsite.

### **3.4 Jurisdictional Delineation**

A Jurisdictional Study has been completed over the entirety of the Montecito Ranch site, including the proposed mitigation area. The proposed creation site will be designed to avoid impacts to jurisdictional areas but close enough to increase the beneficial wildlife uses of the areas.

### **3.5 Present and Proposed Uses**

The site has been historically used for grazing and agriculture production (oat hay) as recently as 2001. The site has not been farmed or grazed in the last five years. The site where the mitigation is proposed is proposed for permanent open space and managed in perpetuity in accordance with the Montecito Ranch Resource Management Plan. The open space is currently fenced with two-strand barbed wire and has posted "No Trespassing" signs.

### **3.6 Reference Site**

The closest reference site available to the project is located along Santa Maria Creek within the Cumming Ranch property, approximately two miles south of the creation area (Figure 4). Based on the results from the Draft Biological Technical Report for the proposed 682.6-acre Cumming Ranch Residential Subdivision (Ecological Ventures California, Inc. 2005), the reference site supports approximately 5.64 acres of willow riparian woodland and riparian scrub habitat of moderate quality and exhibits similar slope and aspect features.

## **4.0 IMPLEMENTATION PLAN FOR THE COMPENSATORY MITIGATION SITE**

### **4.1 Rationale for Expecting Implementation Success**

It is anticipated that the revegetation effort at this location will be successful for the following reasons:

- Appropriate soils occur onsite
- The site will be adjacent to another wetland creation project and therefore, volunteer germination is likely
- Sufficient hydrology occurs in the area to support this habitat type
- The site will be protected in open space that will be managed in perpetuity.

## **4.2 Financial Assurances**

Implementation of the revegetation plan described herein will be the financial responsibility of Montecito Ranch LLC. A revegetation agreement shall be signed and notarized by the property owner following approval of this revegetation plan and accompanied by the required security as agreed upon by the County of San Diego.

## **4.3 Schedule**

A final installation and monitoring schedule will be developed as part of the final revegetation plan.

## **4.4 Site Preparation**

### **4.4.1 Equipment Required**

Some large or heavy equipment is expected to be required to implement this wetland creation plan. Small equipment such as a bobcat, trench diggers, and augers may be utilized. These will either be transported to the site on small trailers or on the bed of pick-up trucks. No equipment will be stored at the mitigation site overnight. In addition, the equipment will not be fueled or maintained with the mitigation area. Larger equipment may include scrapers for the initial soil removal.

### **4.4.2 Site Access**

Since the wetland creation area is within an area proposed for open space, access to the site is an important consideration. Vehicular access will be required for the Installation Contractor as well as the Maintenance Contractor. Access will be via the dirt road to the existing Montecito Ranch house, then along an abandoned agricultural road north of the house. The access route will be flagged by the Biologist prior to construction.

### **4.4.3 Site Protection and Fencing**

The limits of grading of the creation site will be flagged in the field and checked by the Project Biologist prior to grading. In addition, the limits will be identified to the equipment operators. No fencing of the area should be required since the revegetation site is in a larger open space area. The overall open space is protected and will have signs posted to avoid trespassing.

### **4.4.4 Schedule**

Planting should be done between October 1 and April 30 to take advantage of the winter rainy season, dormancy of foliage, and rooting period to ensure optimum survival of the plants. If planting cannot be done during this time supplemental irrigation and other measures may be needed to ensure survivability. A final schedule will be developed with the completion of the Final Revegetation Plan.

#### 4.4.5 Plant material

To achieve the habitat specified within this plan the following container plants will be installed (Table 2). A final landscape plan will delineate the location of these plants and the total of each species proposed.

**Table 2. Proposed Planting Palette for the Montecito Roadway Mitigation.**

Species	Number/Acre	Size	Density
Arroyo Willow ( <i>Salix lasiolepis</i> )	400	1 gallon	6 ft. on center
Black Willow ( <i>Salix gooddingii</i> )	100	1 gallon	6 ft. on center
Narrow-leaf Willow ( <i>Salix exigua</i> )	100	1 gallon	6 ft. on center
Mulefat ( <i>Baccharis salicifolia</i> )	200	1 gallon	6 ft. on center
Arrow-weed ( <i>Pluchea sericea</i> )	200	1 gallon	6 ft. on center
Western ragweed ( <i>Ambrosia psilostachya</i> )	2 lbs	Seed	Scattered
Goldenbush ( <i>Isocoma menziesii</i> )	2 lbs	Seed	Scattered
Mexican rush ( <i>Juncus mexicanus</i> )	2 lbs	Seed	Scattered
Douglas Mugwort ( <i>Artemisia douglasiana</i> )	2 lbs	Seed	Scattered
Hooker's Primrose ( <i>Oenothera hookeri</i> )	1 lb	Seed	Scattered

#### 4.4.6 Plant and Seed Source

All container plant and seed material will be from established reputable nurseries that utilize locally grown plant stock.

#### 4.5 Planting Plan

Minor grading will be necessary to create wetland topographic features such as a bed and bank to mimic a natural riparian system. Minor grading shall ensue before the planting plan is implemented. The installation contractor or grading contractor will be responsible for implementing the grading activities.

Plants would be installed in holes that are slightly larger than the root ball. Holes would be soaked and allowed to drain prior to planting. No soil amendments would be used. Root cages may be used around the root balls to control root

predation from rodents if the installation contractor and project biologist determine it would be necessary. The installation contractor will be responsible for the planting activities.

#### **4.6 Irrigation Plan**

The goal of this conceptual plan is to create a self-sustaining wetland habitat. Given the location of groundwater at less than 8 feet, irrigation should not be required. However, given the region's propensity for lengthy droughts, irrigation will be available if needed. An above ground pipe will be installed around the perimeter of the revegetated wetlands. High impact irrigation heads will be installed on risers that will not impact the vegetation. The irrigation main will either be connected to the existing adjacent well or to a water source associated with the ranch house. The Project Biologist will determine the need to turn the irrigation on or off. Once the biologist deems that the habitat is self-sustaining and that the irrigation lines can be turned off completely, the irrigation system will be removed from the site.

### **5.0 MAINTENANCE DURING MONITORING**

#### **5.1 Maintenance Activities**

##### **5.1.1. Irrigation Maintenance**

The Installation Contractor shall make checks on the irrigation system every three days for the first month after installation in order to assure proper system operations. Thereafter, the Maintenance Contractor will be responsible for the regular maintenance and repair of all elements of the irrigation system. The Maintenance Contractor shall make checks of the irrigation system every week for the first month after taking over maintenance to ensure that the irrigation system is working correctly and coverage is adequate. Thereafter, the Maintenance Contractor will check the system operation at least once a month, except during periods when the system is not in operation, as recommended by the Project Biologist.

##### **5.1.2. Weed Abatement**

Grubbing (mechanical tilling and removal) and grading shall be the primary treatment to initially eradicate and control prolific stands of invasive exotic plants or weeds. The grubbing and grading shall remove all exotic plant seed and propagules that could invade the site. The Project Biologist shall be onsite during all grubbing and grading operations to identify and flag desired natives that shall be protected and to identify invasive exotics that shall be removed. After grubbing and grading, the combinations of manual and herbicide treatments (i.e. Rodeo®) are specified to further eradicate and control weeds.

Some noxious weeds are especially difficult to control and will require the use of herbicides. The Project Biologist will identify these plants. Such control will

consist of cutting the plants to 6" high (only during the active growing season April to August), treating the cut stems with 100 percent concentration of Rodeo® herbicide, or other herbicide approved by a licensed Weed Control Advisor, and the removal of all cut-off top growth to an offsite location. Repeated herbicide applications may be necessary on large plants. All small plants are to be removed with their roots; if possible, before herbicide use is attempted. All herbicide use at the project will be carried out under the supervision of the Project Biologist and a licensed Weed Control Advisor.

#### **5.1.3. Dead Plant Replacement**

The Project Biologist shall flag dead and diseased plants in the field, and a list shall be provided to the Maintenance Contractor for replacement. Dead and diseased plants will be replaced at 4 (after the initial 120 day monitoring period) and 12 months during the first year after installation. If plants fail to meet the success standards at the end of any given year, plant replacement may be one of the remedial measures recommended by the Project Biologist. The cost of replacement plants will ultimately be borne by the Applicant, unless some or all of the responsibility for plant failure is determined to be that of the Contractor or some other party. All plants will be replaced in accordance with the original planting plan unless otherwise specified by the Project Biologist.

#### **5.1.4. Pruning**

Pruning within the creation area is restricted to plants that are diseased. As a remedial measure, pruning may be recommended by the Project Biologist on a species-by-species basis. The Maintenance Contractor will be advised by the Project Biologist if pruning is necessary.

#### **5.1.5. Trash Removal**

The Maintenance Contractor will remove all trash and illegally dumped debris at least once every three months throughout the five-year maintenance period. Care will be taken that these trash removal activities minimize or avoid damage to plantings in the mitigation area. All dead limbs and tree fall will be left in the mitigation area. Weed debris will be removed from, and disposed of outside of the mitigation area. The Applicant shall comply with all litter and pollution laws. All contractors, subcontractors and employees also shall obey these laws and it shall be the responsibility of the Applicant to ensure compliance.

#### **5.1.6. Pest Control**

The Project Biologist shall monitor insects and diseases. Whenever possible, biological controls such as erecting fences will be used in the place of chemical controls. Plants that are severely diseased will be removed and replaced, to prevent the spread of disease and insects. Pesticides will be avoided unless recommended for special problems by the Project Biologist. Rodent control will be restricted to trapping or anti-coagulants with no secondary poisoning effects.

#### **5.1.7. Fertilization**

Fertilization is not to be used onsite during the implementation process. Fertilization may only be used as a remedial measure if success criteria are not being met during the five-year monitoring period.

### **5.2 Schedule**

#### **5.2.1. Maintenance Schedule**

The maintenance period will extend five years, commencing when the Project Biologist certifies that the mitigation plantings have been completed. The overall post-construction maintenance will be divided into an initial 120-day installation-maintenance period and an additional five-year establishment maintenance period.

#### **5.2.2. Irrigation and Schedule**

The Project Biologist, based upon weather patterns and soil moisture levels, shall determine the irrigation regime. Water will be applied to the site in a manner that ensures deep penetration of water to the soils surrounding the root balls, i.e., deep and infrequent watering. Because these plants must eventually survive in the absence of supplemental irrigation, deep roots are needed to tap into the perennial soil moisture. Over-watering promotes unwanted shallow root systems and undesirable weeds. Deep and infrequent watering stimulates the development of extensive root systems. The Installation and Maintenance Contractors shall provide the Project Biologist with the cycle start times and the length of each cycle for all valves in the mitigation area. These times and cycles will be changed as recommended by the Project Biologist. When changes are made, the Contractor will provide the Project Biologist with written confirmation of the date and time at which the change was made. The Project Biologist and Contractor shall meet and evaluate the irrigation regime at least six times per year (bi-monthly).

#### **5.2.3. Irrigation System Removal**

The irrigation system in the mitigation area is to be removed once the restoration plantings have become established and self-sustaining. The Project Biologist will decide how and when irrigation is to be phased out. However, the irrigation system should be kept functional during the five-year maintenance period, even if it is not used, in the event of replanting and replacement of plants that would require temporary irrigation. Upon completion of the irrigation period, all irrigation components, which are above grade, will be removed by the Contractor from the mitigation area and all valves permanently disconnected.

#### **5.2.4. Weed Abatement Schedule**

The Installation Contractor shall maintain the mitigation site as weed free during the installation period. After the installation is deemed complete, there will be 10% tolerance of noxious weeds within the mitigation area. Noxious weeds

include perennial ryegrass (*Lolium perenne*), all brome species (*Bromus spp.*), black mustard (*Brassica nigra*), Bermuda grass, and any other noxious weeds identified by the Project Biologist. Because of the critical nature of weed control at the beginning of the project, it shall be understood that the Contractor is to be held responsible for reseeding or replanting if weeds are not removed on a timely basis, thus hampering or preventing the establishment of hand-seeded species or container plants. A timely basis shall be understood to be within one week of the written recommendation by the Project Biologist or as specified in the mitigation plan. Weeds will be removed at intervals no greater than 10 days. After the installation period, weed removal will take place at least once a month during the first year, once every four months for years two through four, and twice a year during year five. More frequent weed removal may be required as necessary, and recommended by the Project Biologist, to keep weeds at manageable levels.

## **6.0 MONITORING PLAN FOR THE COMPENSATORY MITIGATION SITE**

### **6.1 Performance Standards for Target Dates and Success Criteria**

#### **6.1.1. Success Criteria**

Final success criteria are proposed which will be used to determine the completion and ultimate success of the mitigation. Fulfillment of these criteria will indicate that the mitigation area has accomplished the long-term goals of this mitigation plan, i.e., the created willow riparian woodland and riparian scrub habitat provide similar functions and values as natural riparian habitats that have not been impacted.

The proposed plan will result in the creation of willow riparian woodland and riparian scrub habitat that will meet the habitat functionality of jurisdictional wetlands, such as the reference site along Santa Maria Creek. The final success criteria call for:

- 75% total cover after three years for all overstory and understory species
- 90% total cover for all overstory and understory species after five years

In addition, final success will be based on survivorship of plantings and shall meet the following criteria:

- 90% survival of original tree plantings;
- 80% survival of original shrub plantings; and
- 70% cover of native ground cover species.

To determine sufficient growth and health the following success criteria for growth of planted trees must also be established. Willow trees planted from one-gallon containers shall reach 10 feet after three years, and 15 feet after five years.

**Table 3. Success Standards for Willow Tree Heights.**

SPECIES	SIZE AT PLANTING	HEIGHT	
		@ 3 Years	@ 5 Years
Arroyo Willow	1 gallon	10 ft	15 ft
Black Willow	1 gallon	10 ft	15 ft
Narrow-leaved Willow	1 gallon	10 ft	15 ft

The goal of this program is the establishment of a self-sustaining community; the plants must be able to eventually survive without supplemental irrigation. A detailed description of the success standards is provided below.

If the specified minimum cover, survivorship, and growth standards are not met then the Applicant will be responsible for any corrective measures as determined in coordination with the resource agencies. Any replacement plantings will be subject to the monitoring requirements and success criteria described herein.

#### **6.1.2 Success Standards**

This section defines the yearly performance standards for evaluating the progress of the project as it compares to the reference site and the proper establishment of the plant materials. These standards will be used to determine the timing of appropriate remedial measures to correct any problems that may arise. Remedial measures are only partially defined here. The ultimate remedial measures are left to the discretion of the Project Biologist, since any given measure will not necessarily always be the appropriate or cost effective remedy. Remedial measures will include, but not necessarily be restricted to additional weeding, fertilization, pest control, replanting, modifications to the irrigation regime, changes to the irrigation system, and species substitution.

Table 3 defines those success standards for the mitigation area that shall be utilized to assess the horticultural and botanical data collected in order to determine the necessity of remedial measures. These standards will ensure that the mature cover goals in the design of the plant palette are ultimately achieved.



**Table 4. Success Standards and Recommended Remedial Measures.**

<b>Standard</b>	<b>Remedial Measure if Standard not Met</b>
<b>Year 1</b>	
1. 30% native groundcover of all species by transect analysis	Reseed/Replant; Substitutions if approved by Project Biologist
2. Adequate establishment of all species	Reseed/Replant; Substitutions if approved by Project Biologist
<b>Year 2</b>	
1. 60% native groundcover by transect analysis	Reseed/Replant based on the recommendations of the Project Biologist
2. 80% survival of container shrubs 90% survival of container trees	Replant based on the recommendations of the Project Biologist
<b>Years 3-5</b>	
1. 90% native ground cover by transect analysis	Reseed/Replant based on the recommendations of the Project Biologist
2. 80% survival of container shrubs 90% survival of container trees	Replant, recommendations to be provided by the Project Biologist based upon actual field conditions.

In addition to survivorship and cover, tree height standards outlined in Table 3 must be met for the species specified. A random selection of thirty percent of the planted trees will be measured to evaluate these criteria.

## **6.2 Target Functions and Values**

The focus of this revegetation plan is to construct a successful native wetland habitat area within the open space area that will thrive on its own and provide suitable foraging and breeding habitat for local wildlife after the five-year monitoring period. The design will consist of creating approximately 0.24 acre of willow riparian woodland and riparian scrub habitat along a created drainage channel that will occur within the central portion of the open space area. The goal is to add to the general diversity of habitat and to provide foraging, nesting, and roosting opportunities for wildlife.

## **6.3 Target Hydrological Regime**

The revegetation plan will be designed to mimic the natural functions of a native riparian habitat. Water is expected to flow through and saturate the area during precipitation events. It will match local hydrologic features such as ephemeral water movement and scouring, high water table, and erosion and sedimentation. With natural hydrologic factors present, this area would have adequate hydrology to support native riparian vegetation onsite.

## **6.4 Target Acreages**

This revegetation plan is being prepared in response to impacts associated with offsite roadway expansions or extensions. No RPO wetlands are proposed to be impacted on the Montecito Ranch property. Roadway improvements including the expansion of the existing Montecito Road would impact 0.24 acres of Riparian woodland at one location along Santa Maria Creek. Impacts will be mitigated at a total ratio of 3:1 (0.72 acre) including habitat creation at a 1:1 ratio and habitat enhancement at a 2:1 ratio.

This revegetation plan is intended to mitigate for 0.24 acre of wetlands. Once the revegetation plan is approved, a final Revegetation Plan must be prepared with landscape drawings and approved by the County of San Diego.

The proposed mitigation will be the creation and enhancement of willow riparian woodland and riparian scrub. This habitat, once established will meet or exceed the functions of the areas impacted.

## **6.5 Monitoring Methods**

### **6.5.1. Monitoring Program**

The monitoring program will begin, prior to commencement of mitigation site construction activities, with a pre-construction education session, involving the project's Construction Contractors, the Project Biologist, and the Installation Contractor. Monitoring will continue for five years after the completion of the installation and/or until the project is given final approval by the County of San Diego. At this time, the County shall determine if the mitigation program has adequately achieved the performance standards. If the performance standards are deemed by these agencies to be met, no further monitoring will take place. If the County determines that the performance standards have not been adequately achieved, the County, applicant, and Project Biologist shall define additional monitoring and maintenance activities that need to be undertaken.

### **6.5.2. Horticultural Monitoring**

Horticultural monitoring will be assessed qualitatively during regularly scheduled site visits. The project biologist will visually assess the progress of the mitigation effort making notes on project site including plant health, exotic weed growth, trash, and any other pertinent information. All observations will be recorded in a field log during the visits.

A written memorandum shall be prepared after each monitoring visit. Memoranda will list observations, problems, and recommend appropriate remedial measures, and be sent to the Maintenance Contractor for implementation. These memoranda will focus on horticultural problems such as weeding, irrigation regime and repair, trash removal, pruning, pest control, etc. The Project Biologist shall be responsible for recommending any and all remedial measures to be

implemented, and will assist in determining the irrigation schedule and the timing of the phasing-out of the irrigation system.

### **6.5.3. Botanical Monitoring**

Growth and establishment of the habitat will be quantitatively assessed using the line-intercept technique for all three vegetation levels: tree overstory species, understory shrub species and groundcover understory. The vegetation within the mitigation site will be sampled through the use of four permanent, twenty-five meter long transect. Transect data collected will include survivorship, density, percent cover of species, tree heights, and tree health/vigor (i.e., diameter at breast height (dbh) measurements). Permanent photo points will be established at the transect location and at predetermined sites in general.

The reference site will be utilized to confirm conditions noted in the revegetation area. For example, anomalies related to drought, disease, or other uncontrollable conditions.

### **6.5.4. Modification of the Monitoring Period**

The specified monitoring period is five years from the completion of the installation program. If at the end of the five-year monitoring, any of the revegetated areas do not meet the project's final success standards, then the monitoring and maintenance period would need to be extended, and a specific set of remedial measures implemented. The length of the additional monitoring and any necessary remedial measures would be determined in consultation with the County of San Diego. Only those areas failing to meet these final success standards would require the additional remedial measures. This interactive process would continue until all the standards are met, or until the County of San Diego determines that the mitigation goals have been adequately achieved.

## **6.6 Monitoring Schedule**

### **6.6.1. Horticultural Monitoring**

The Project Biologist on a biweekly basis shall inspect plantings during installation. During the first two years, the planting shall be inspected at least once every five weeks and after a large storm event. During the final three years of monitoring, the Project Biologist shall visit the project site a minimum of six times per year. Monitoring visits, however, may be conducted at a higher frequency to ensure the project's successful progress and maintenance.

### **6.6.2. Botanical Monitoring**

The Project Biologist shall be responsible for the supervising of all of the botanical monitoring. Botanical monitoring will be conducted concurrently with horticultural monitoring. Baseline data on a representative sample of plants will be taken in the first year to evaluate growth during the subsequent years.

Monitoring will be conducted during the active growing season, from March to August.

## **6.7 Monitoring Reports**

Both qualitative and quantitative reports are required to be submitted. Reports will be submitted after each monitoring event per the following schedule:

- Year 1: Quarterly (3 qualitative, 1 quantitative)
- Year 2: Biannually (1 qualitative, 1 quantitative)
- Year 3: Biannually (1 qualitative, 1 quantitative)
- Year 4: Annual (quantitative)
- Year 5: Annual (quantitative)

Qualitative reports will document the general health of the planted specimen and the overall quality of the site. Quantitative monitoring reports shall be filed within 30 days after the annual botanical monitoring has occurred in each of the five years following planting. Reports will describe the progress of the site, recommend remedial measures, and evaluate past remedial measures that have been implemented during the reporting period. Each report will include a summary and analysis of the horticultural and botanical monitoring data collected from both the mitigation and reference sites, and an evaluation of the project's progress relative to the success standards including survival, height of trees, percent cover of tree, shrub and understory layers, and percent cover for the riparian habitat. Copies of these reports will be sent to the County of San Diego within 30 days of completion of the monitoring period.

## **7.0 COMPLETION OF COMPENSATORY MITIGATION**

When the monitoring period is complete, and the final success criteria have been met, the applicant shall notify the County of San Diego when the annual report documenting this completion is submitted.

Following receipt of this report, the County of San Diego will require a site visit to confirm the completion of the mitigation effort and any jurisdictional delineation.

## **8.0 CONTINGENCY MEASURES**

### **8.1 Initiating Contingency Procedures**

The mitigation area shall not be deemed successful if non-native vegetation occupies greater than 10% of the area. The Applicant shall be responsible for all costs incurred for such replacement planting or other remediation measures.

If an annual performance criterion is not met for any portion of the mitigation project in any year, or if the final success criteria are not met, the Project

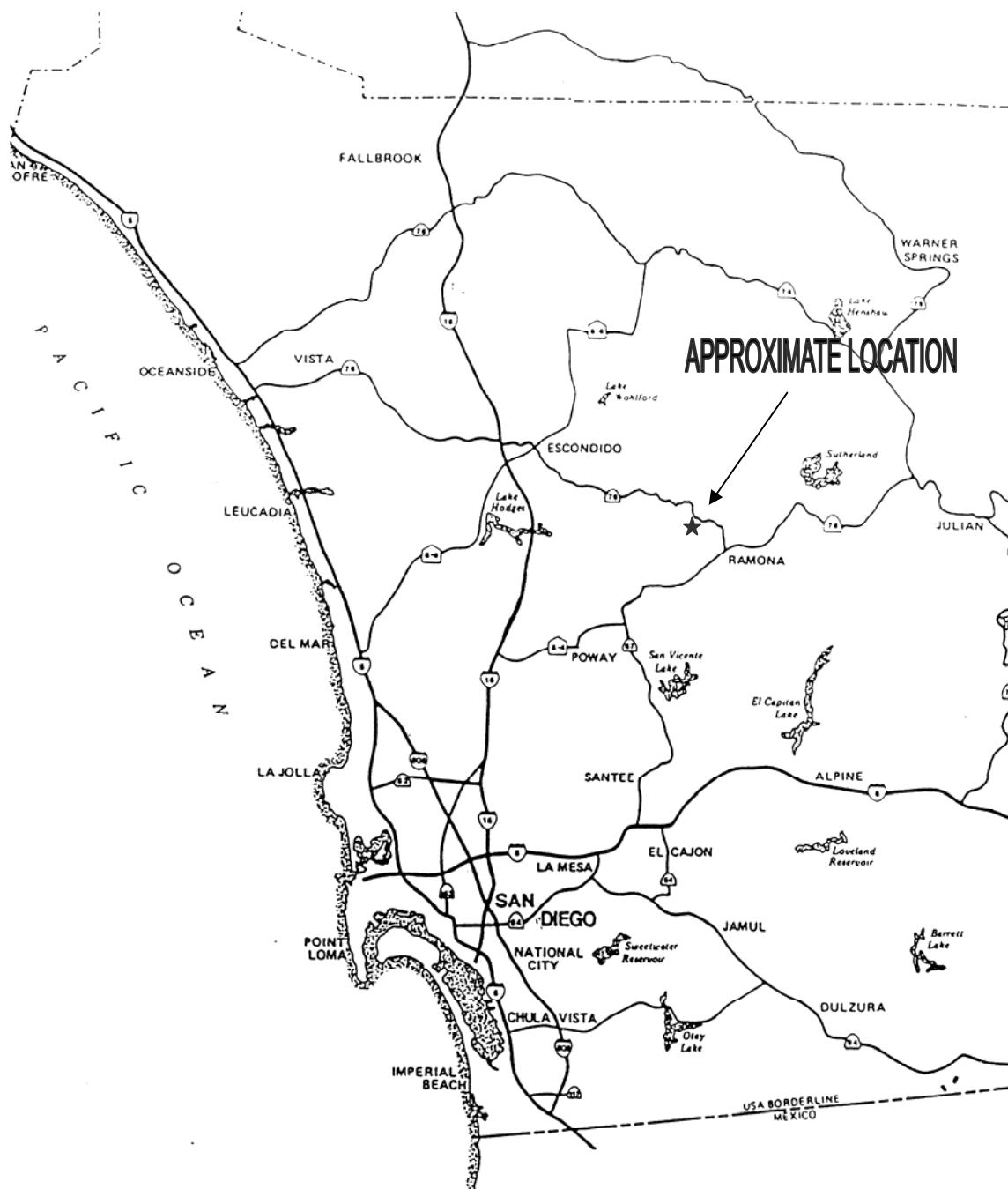
Biologist will prepare an analysis of the cause(s) of failure, and, if determined necessary by the County of San Diego, propose remedial action for approval. If the mitigation site has not met the performance criteria, the responsible party's maintenance and monitoring obligations shall continue until the County of San Diego gives final project confirmation. Remedial measures for all five years of the monitoring period are listed in Table 4 of the Success Standards section of the Monitoring Program.

## **8.2 Alternative Locations for Contingency Compensatory Mitigation**

Should the proposed mitigation area be deemed inappropriate by the County of San Diego, an alternative site will be identified within the Montecito property boundary or alternately the Santa Maria Creek Watershed. Site selection will be in accordance with all current regulations for mitigation.

## **8.3 Funding**

If the mitigation proposed in this plan cannot be successfully achieved at the proposed mitigation site, the applicant will provide the County of San Diego with the following information: an alternative mitigation location, an indication of funds available to pay for the planning, implementation, and monitoring of the contingency procedures required to achieve the mitigation goals; and a list of the names, addresses and phone numbers of persons or entities responsible for implementing and monitoring the contingency procedures.



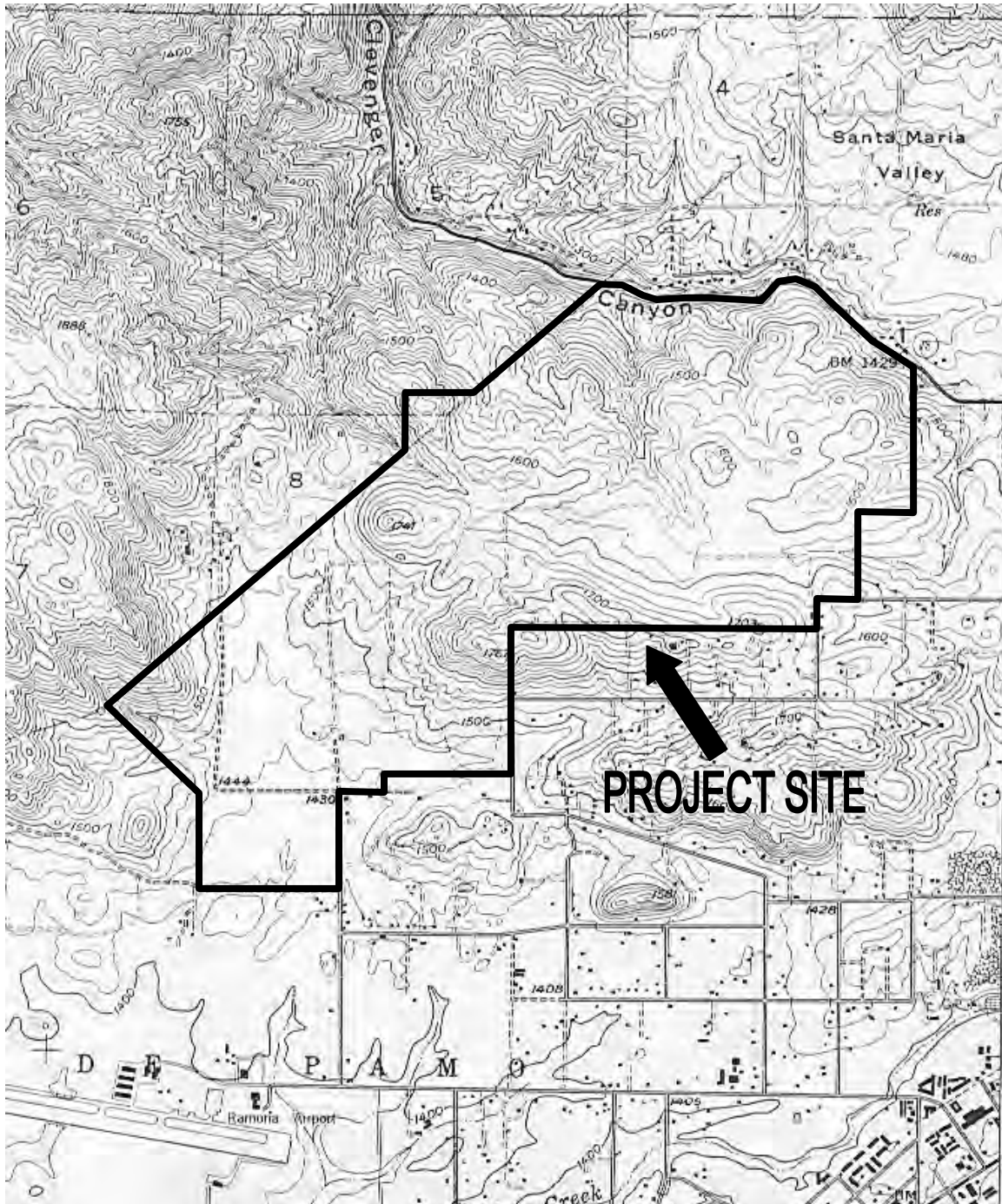
**REC**  
Consultants, Inc.

# REGIONAL LOCATION MONTECITO RANCH

NO SCALE



Figure  
1



**REC**  
Consultants, Inc.

**USGS SAN PASQUAL 7.5' QUAD  
MONTECITO RANCH**

Range 1 East, Township 13 South

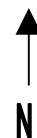
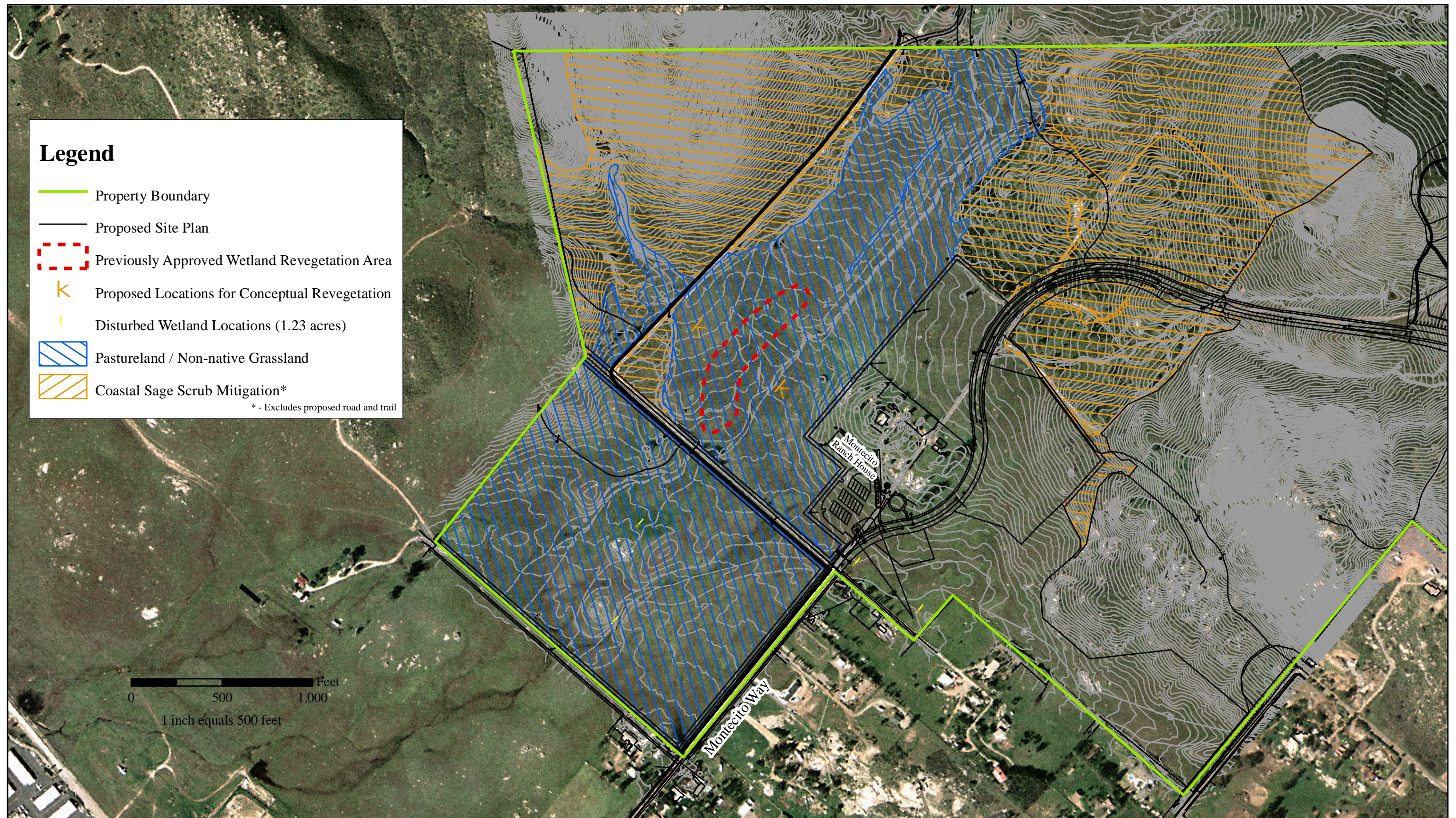
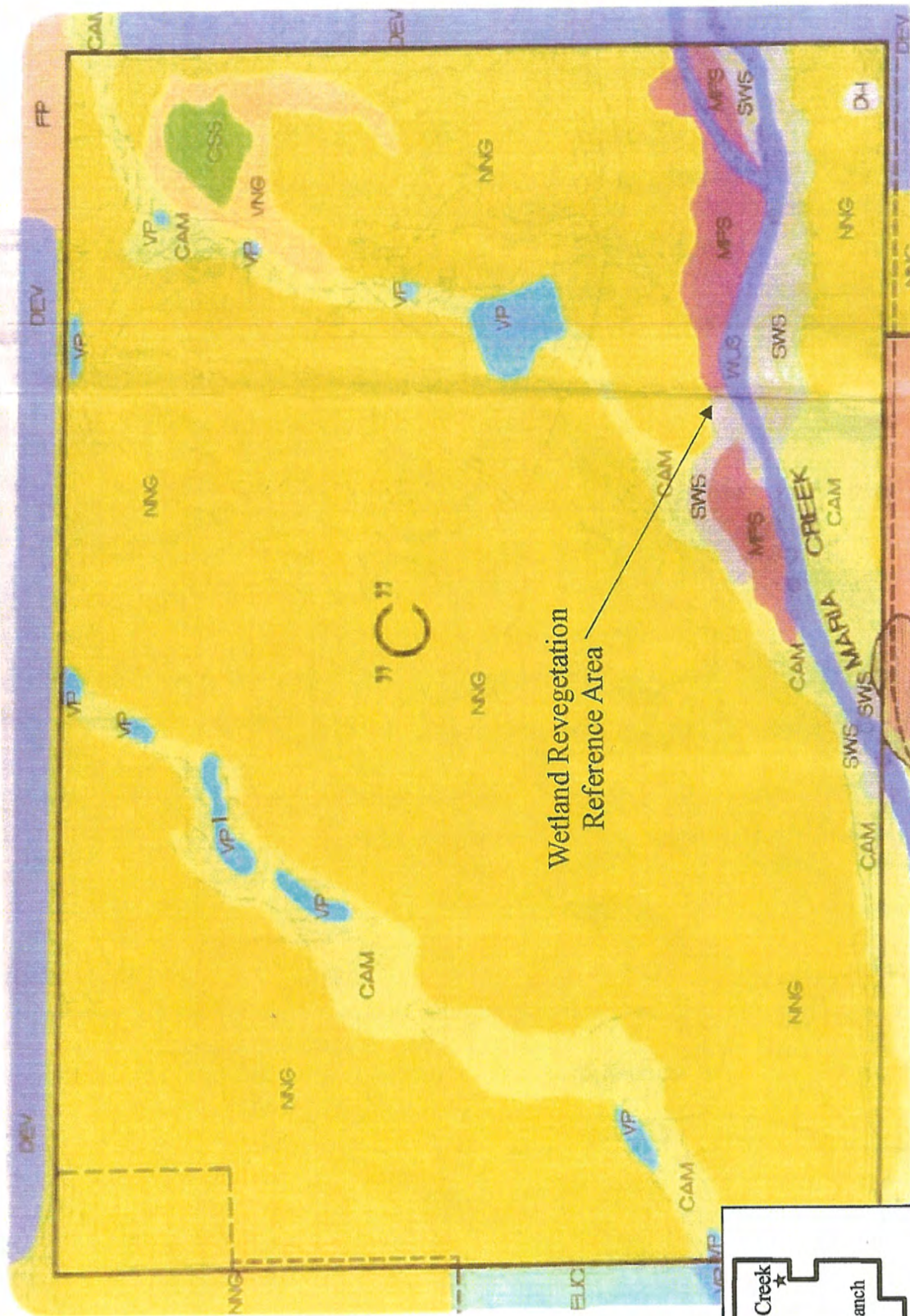


Figure  
2







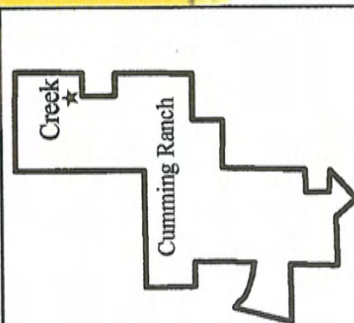


Source: Snipes-Dye Associates 1/14/05

**Reference Site Location**  
Montecito Ranch

**Figure**  
4

February 2006



**APPENDIX A**  
**SANTA MARIA CREEK REFERENCE SITE**  
**PHOTOGRAPHS**



## REFERENCE SITE PHOTOGRAPHS



Southern riparian scrub along Santa Maria Creek (looking east).



Southern riparian scrub along Santa Maria Creek (looking north).





Southern riparian scrub understory along Santa Maria Creek (looking northeast).



Southern riparian scrub understory along Santa Maria Creek (looking northeast).





Southern riparian scrub upland terrace along Santa Maria Creek (looking east).



Southern riparian scrub upland terrace along Santa Maria Creek (looking south).

**APPENDIX B**  
**CUMMING RANCH ACCESS LETTER**



## 805 PROPERTIES

February 21, 2006

Mr. David Davis  
Montecito Ranch, LLC  
402 West Broadway, Suite 2175  
San Diego, CA 92101

RE: Authorization for entry and access to Cumming Ranch property

Dear Dave:

As requested, 805 Properties ("Owner") hereby authorizes entry and access to yourself, other representatives and agents of the Montecito Ranch, LLC, REC Consultants, and County of San Diego's associated staff to the Cumming Ranch property in Ramona, California. It is understood that your entry and access is necessary to view and examine the biological resources and terrain located in Areas B and C of the property.

Please avoid any vehicle entry into Area C - the fenced area between the Santa Maria Creek and Airport Road.

Owner shall not be held responsible for any damages, or liabilities, resulting from your entry and access to the property.

Unless renewed, this authorization for entry and access shall automatically be considered terminated at the end of six (6) months from the date of this letter.

Sincerely,



Gene Driscoll  
Managing Partner